

Appendix A Acronyms and Abbreviations

AB	Assembly Bill
AF	acre-feet
Aqueduct	California Aqueduct
Basin	San Joaquin River Basin
BiOp	Biological Opinion
BMP	Best Management Practices
CAL FIRE	California Department of Forestry and Fire Protection
CCR	California Code of Regulations
CDOC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
DEIS	Draft Environmental Impact Statement
Delta	Sacramento-San Joaquin Delta
DMC	Delta-Mendota Canal
DPCR	Del Puerto Canyon Reservoir

Appendix A – Acronyms and Abbreviations

DPS	distinct population segment
DPWD	Del Puerto Water District
Exchange Contractors	San Joaquin River Exchange Contractors Water Authority
EPA	U.S. Environmental Protection Agency
ESU	evolutionarily significant unit
FEIR	Del Puerto Canyon Reservoir Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
GHG	greenhouse gases
HAB	Harmful algal blooms
MT	metric tons
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NO _x	nitrogen oxides
PG&E	Pacific Gas and Electric
Project Sponsors/ Partners	Del Puerto Water District and San Joaquin River Exchange Contractors Water Authority
Reclamation	Bureau of Reclamation
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SJRECWA	San Joaquin River Exchange Contractors Water Authority
SO _x	sulfur oxides
SWPPP	Storm Water Pollution Prevention Plan
TAF	Thousand Acre-Feet

Appendix A – Acronyms and Abbreviations

TID	Turlock Irrigation District
TDS	total dissolved solids
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VMT	vehicle miles traveled
WIIN	Water Infrastructure Improvements for the Nation

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APPENDIX C: Additional Biological Resources Figures

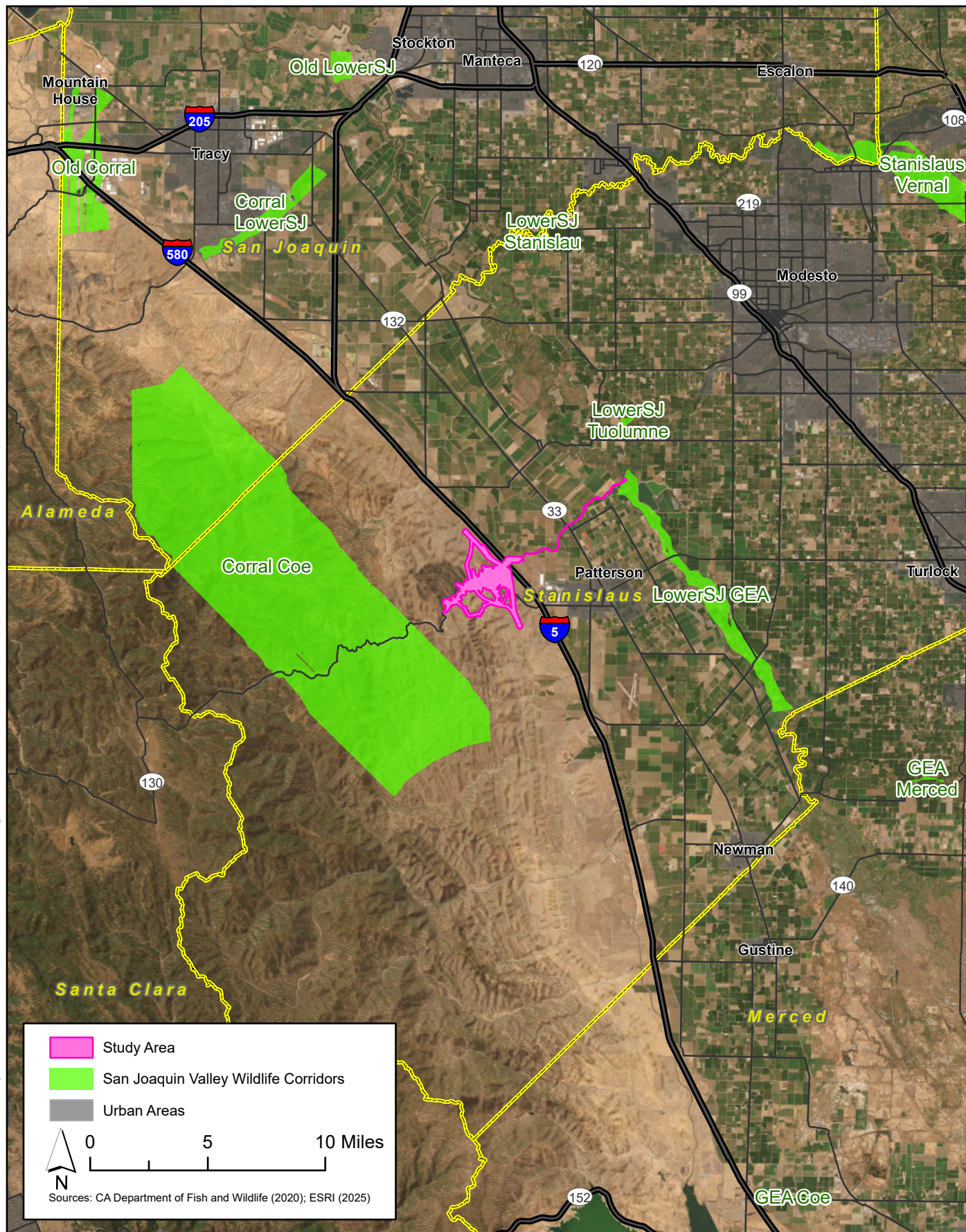


Figure 11
San Joaquin Valley Wildlife Corridors

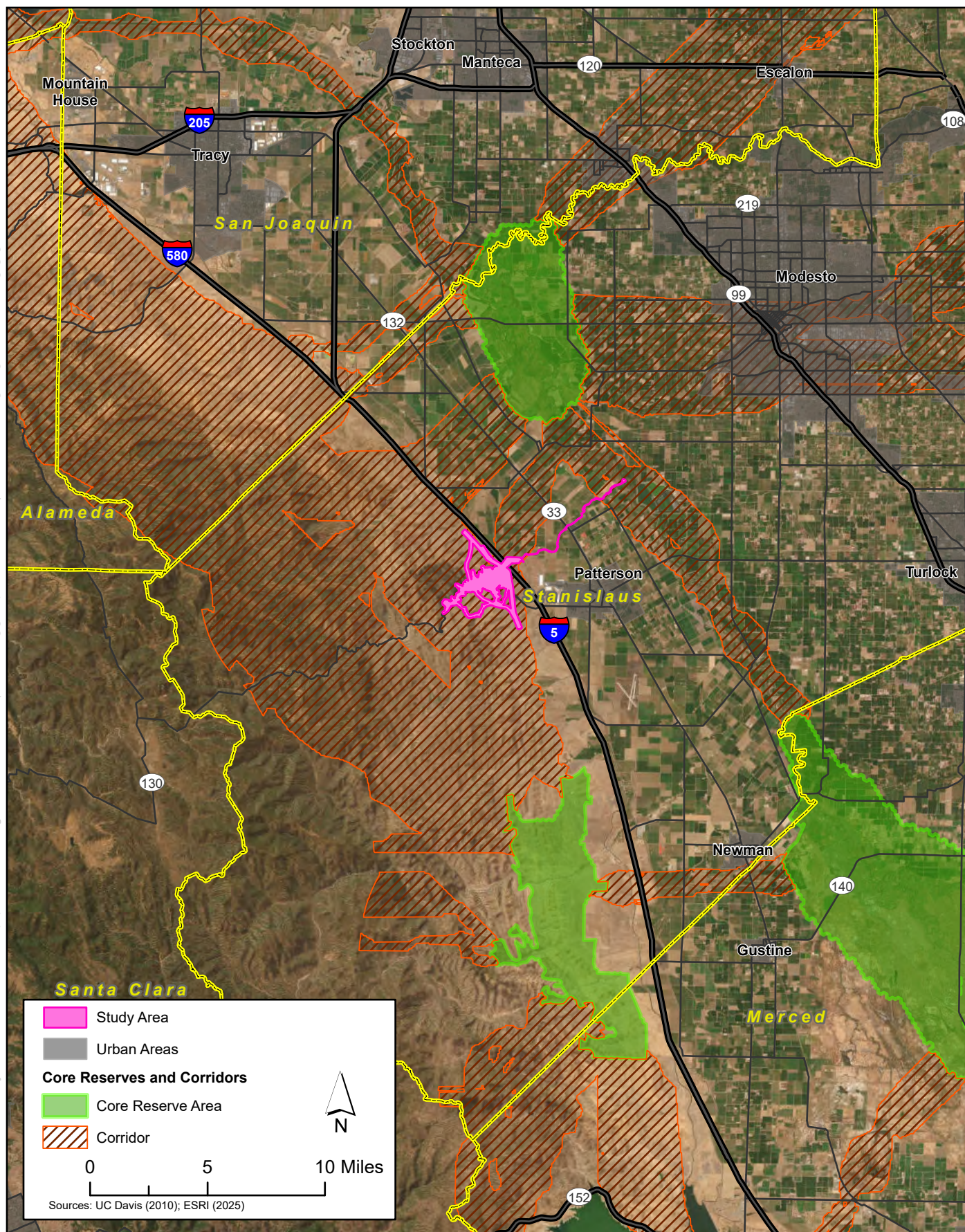


Figure 12
Core Reserves and Corridors - UC Davis

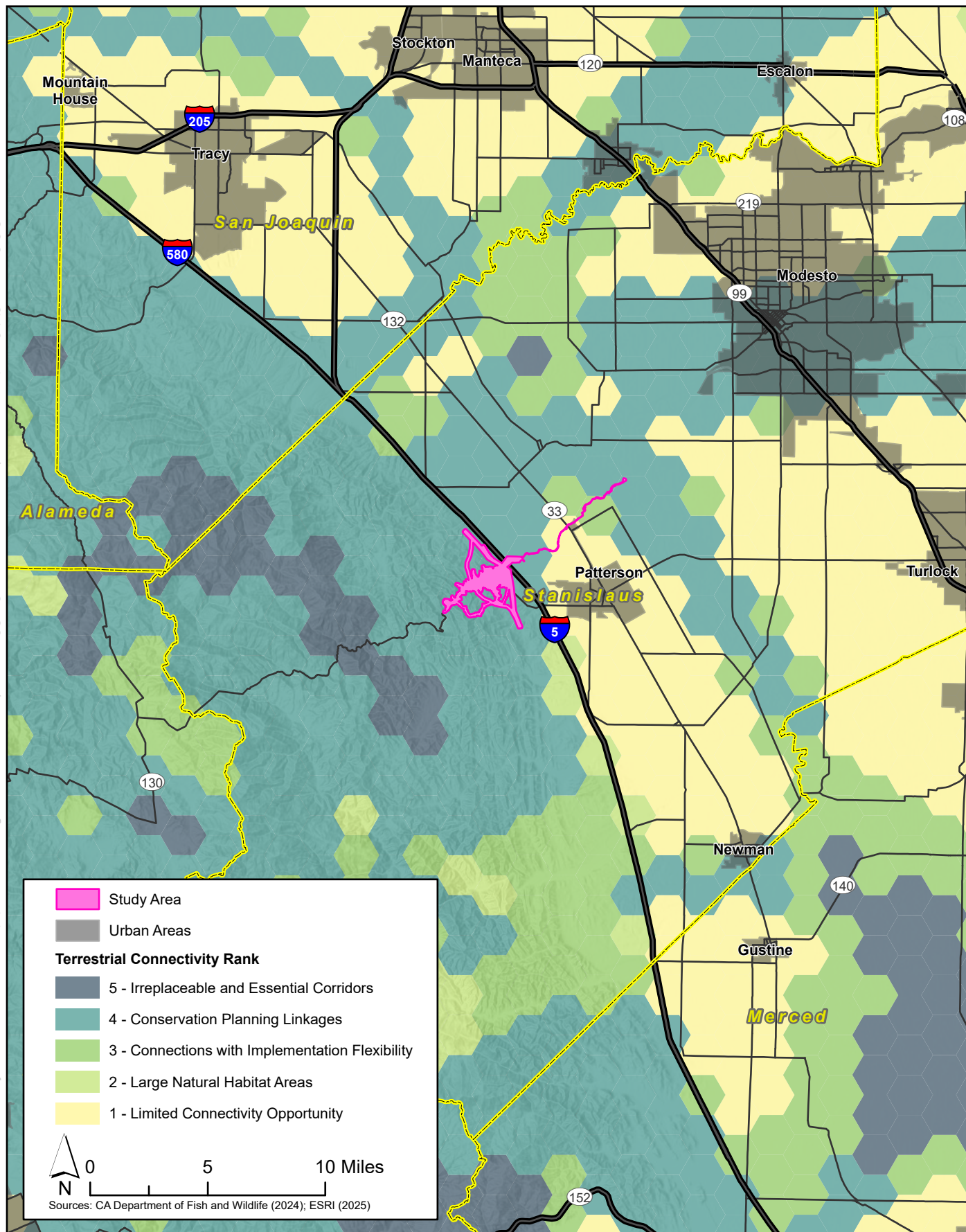


Figure 13
CDFW ACE Connectivity

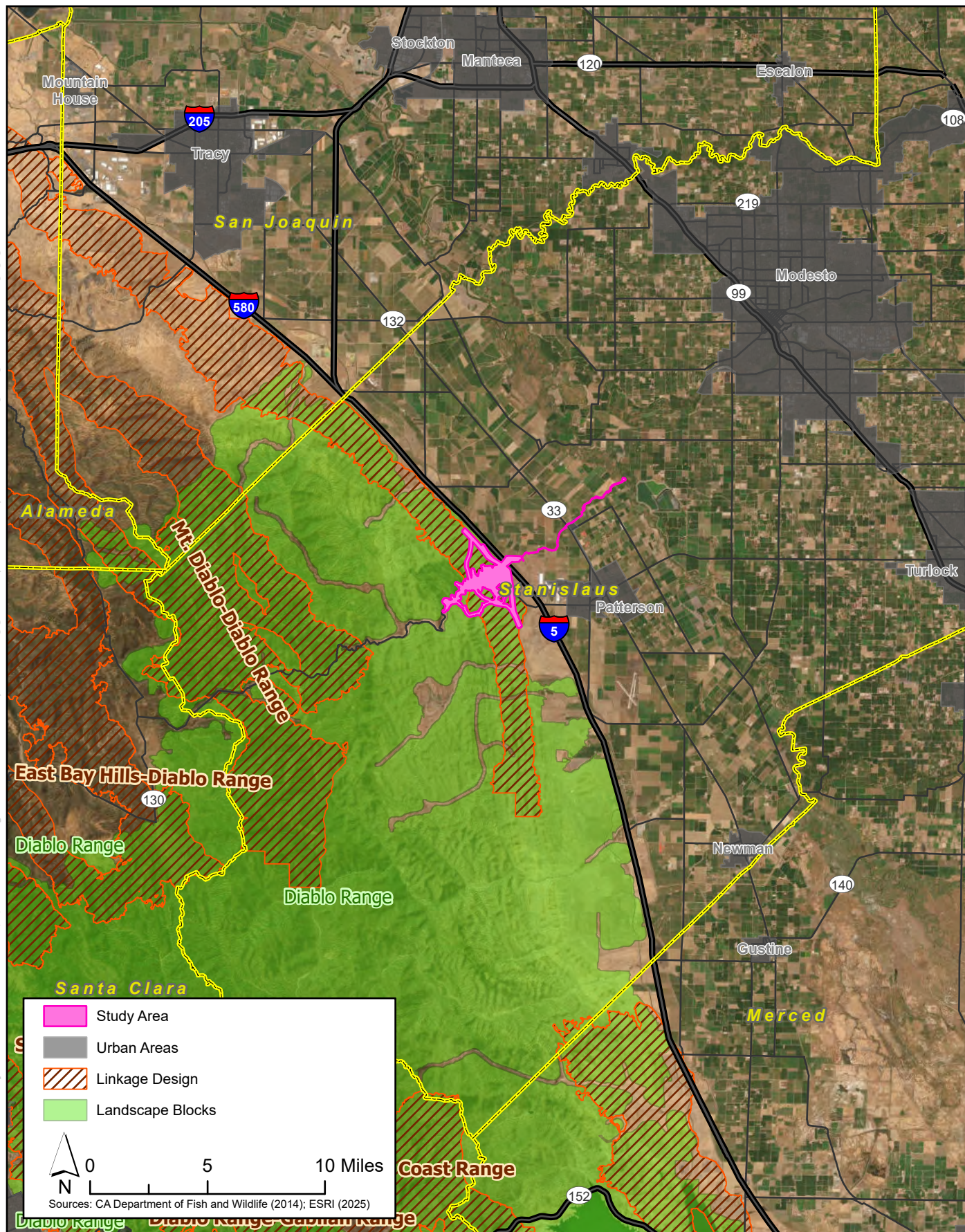


Figure 14
Bay Area Critical Linkages

Path: \\POC\ITRDS\GIS\01\Projects_1\Woodard_Curran\104240_Del_Puerto\Figures\Doc\EIR_S_BA_Updates_2025\3-3-7_Essential_hab_Connectivity.aprx Date Saved: 11/3/2025 2:13 PM User: 58303

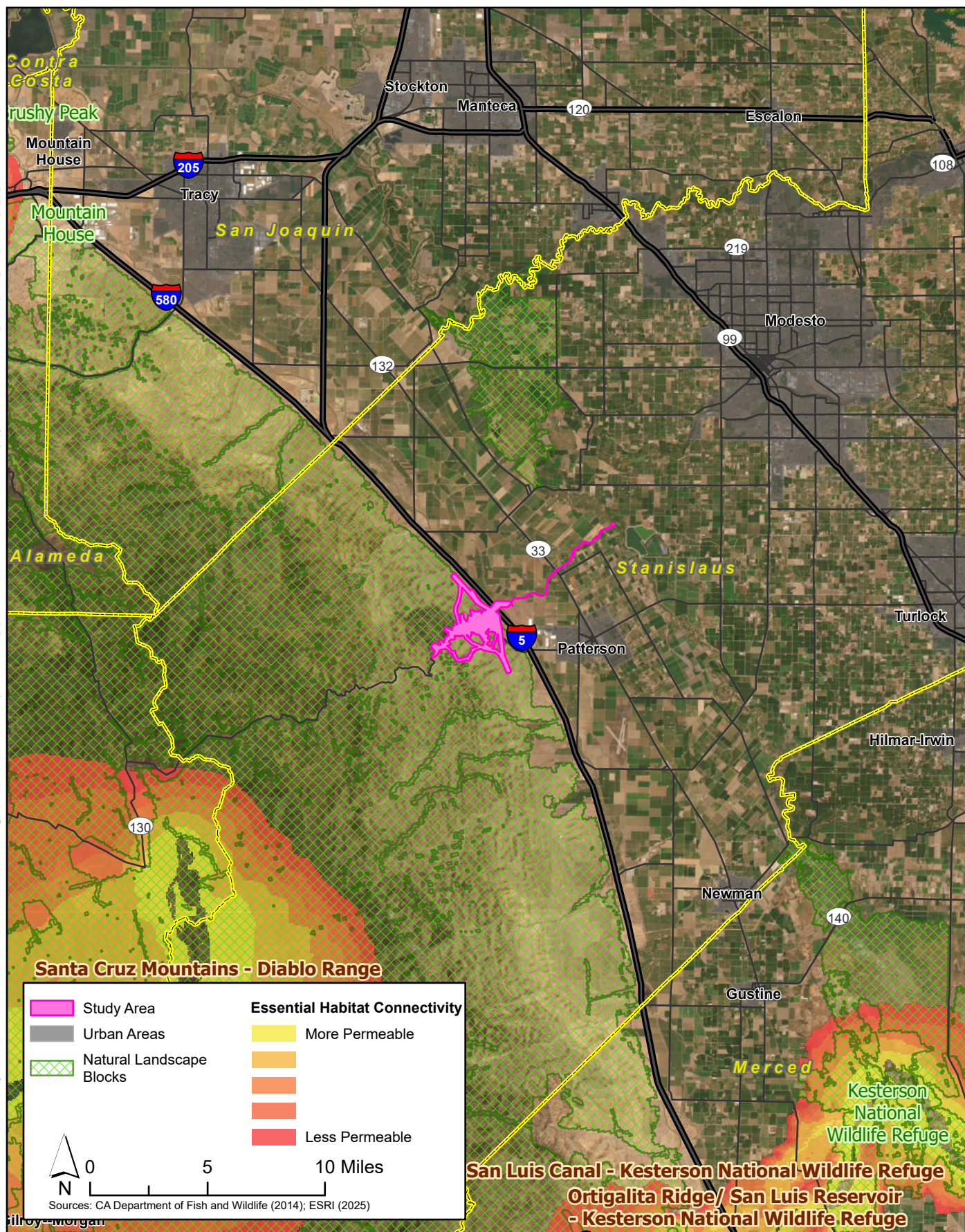


Figure 15
California Essential Habitat
Connectivity Regional Corridors

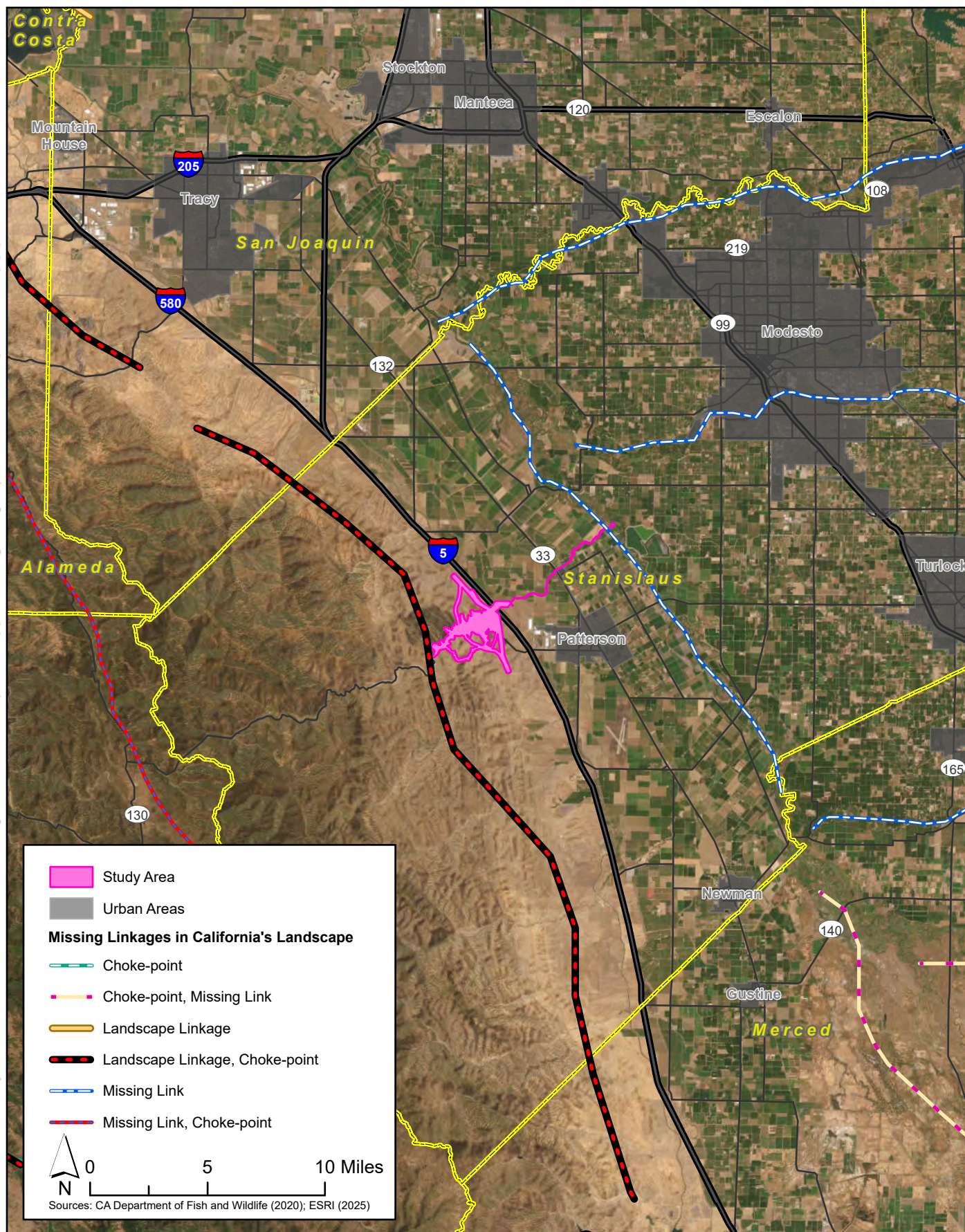


Figure 16
Missing Linkages in California's Landscape

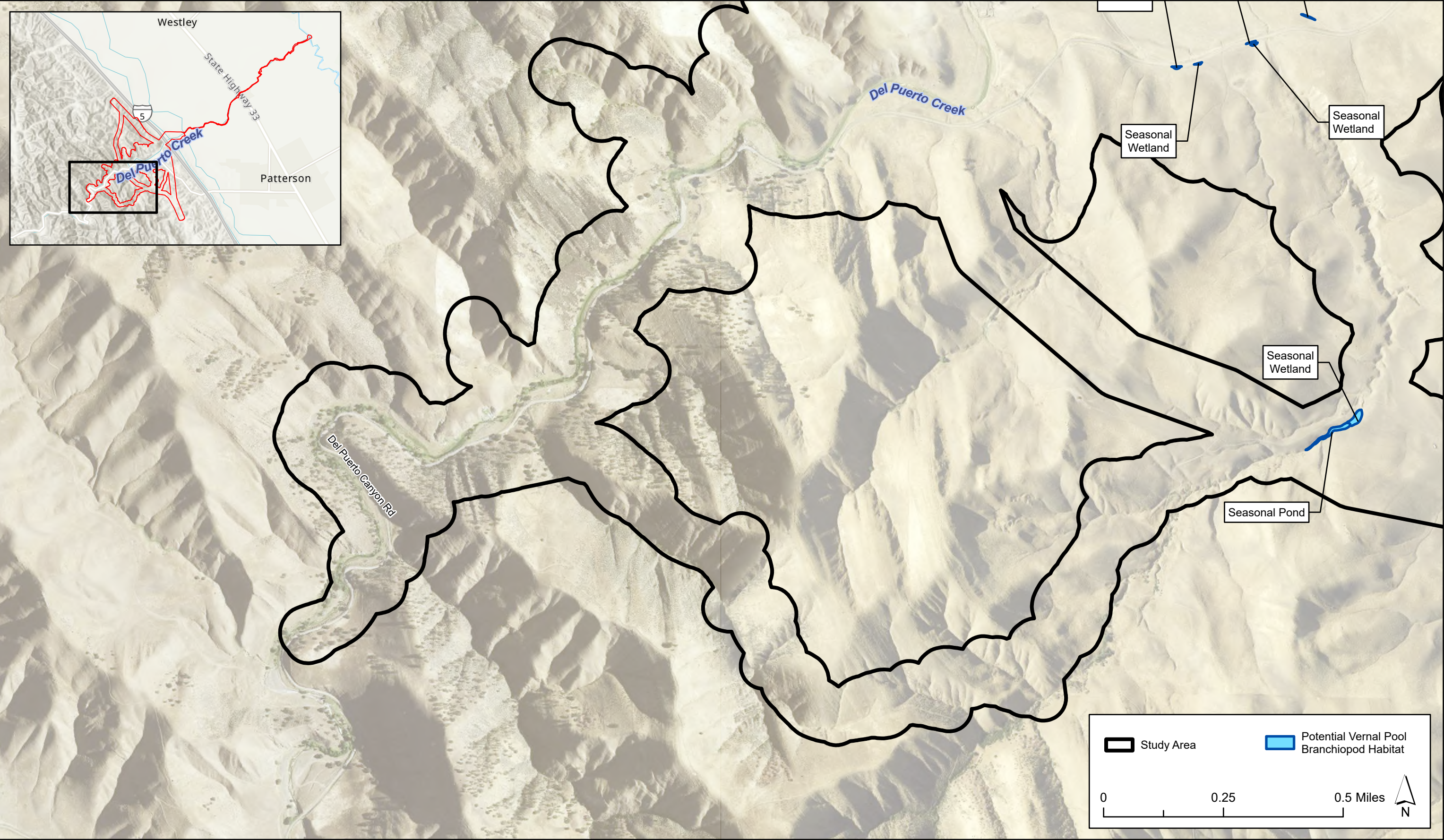


Figure 17
Modeled Vernal Pool Branchiopod Habitat

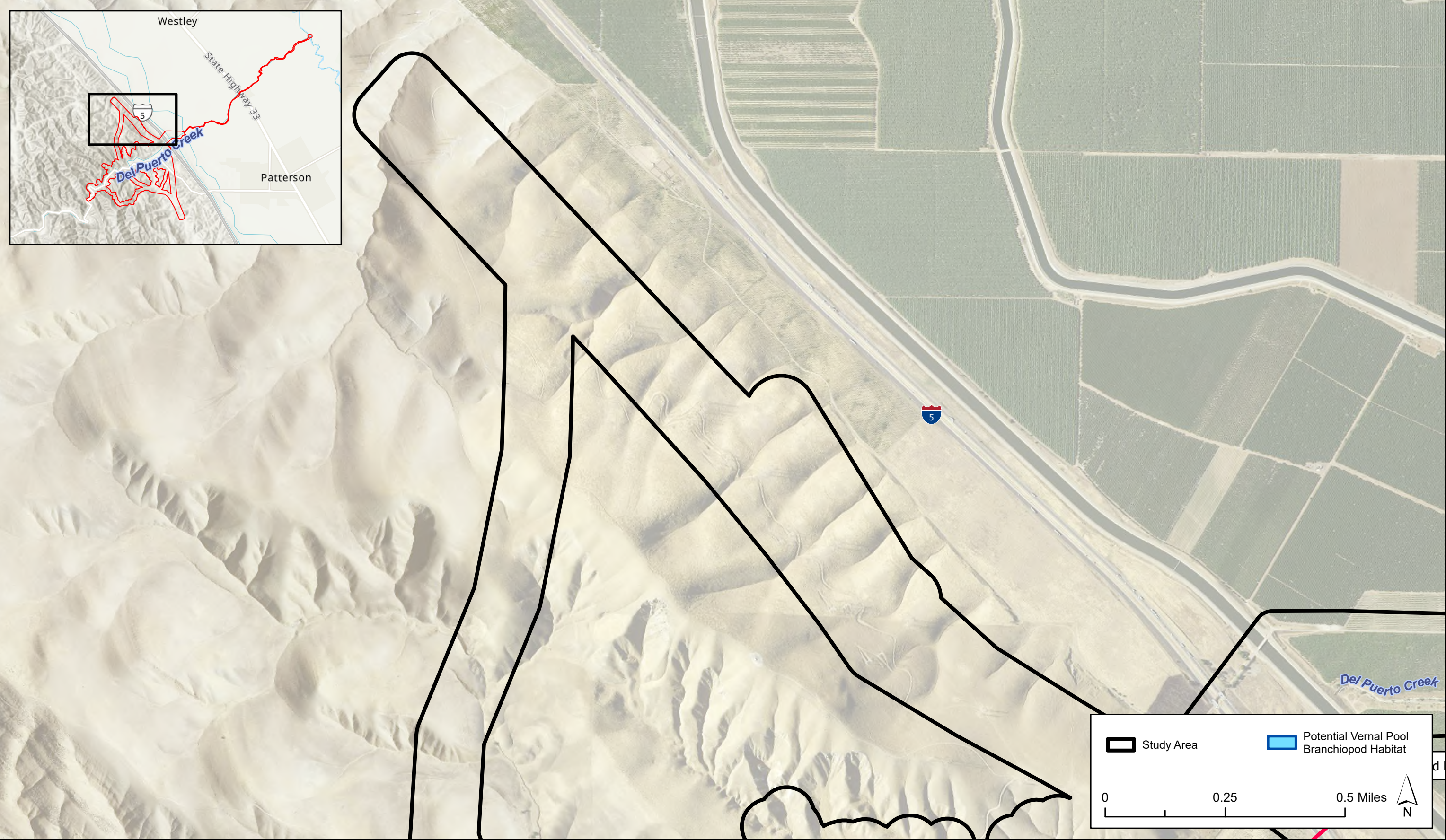


Figure 17
Modeled Vernal Pool Branchiopod Habitat

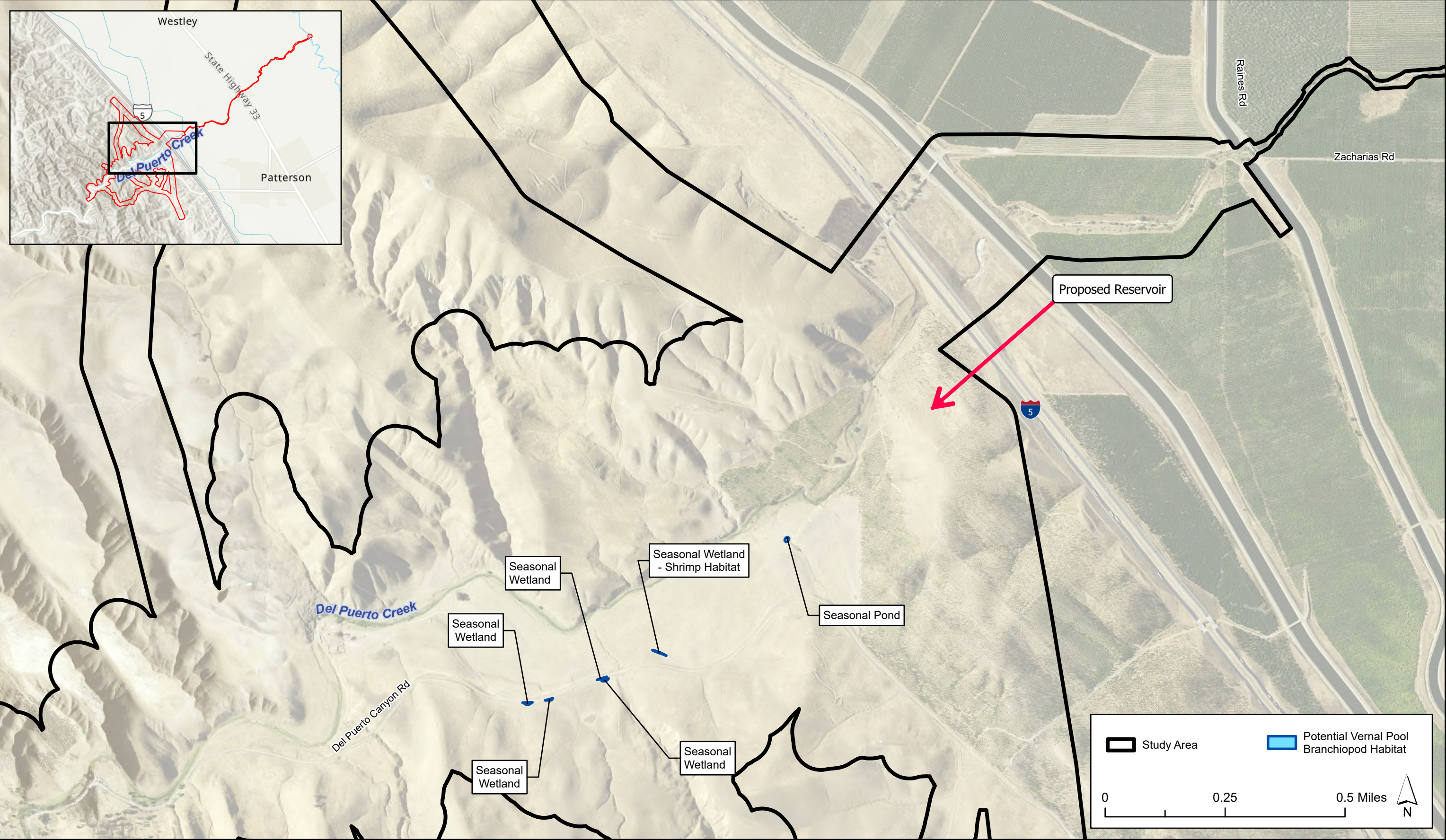


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Modeled Vernal Pool Branchiopod Habitat

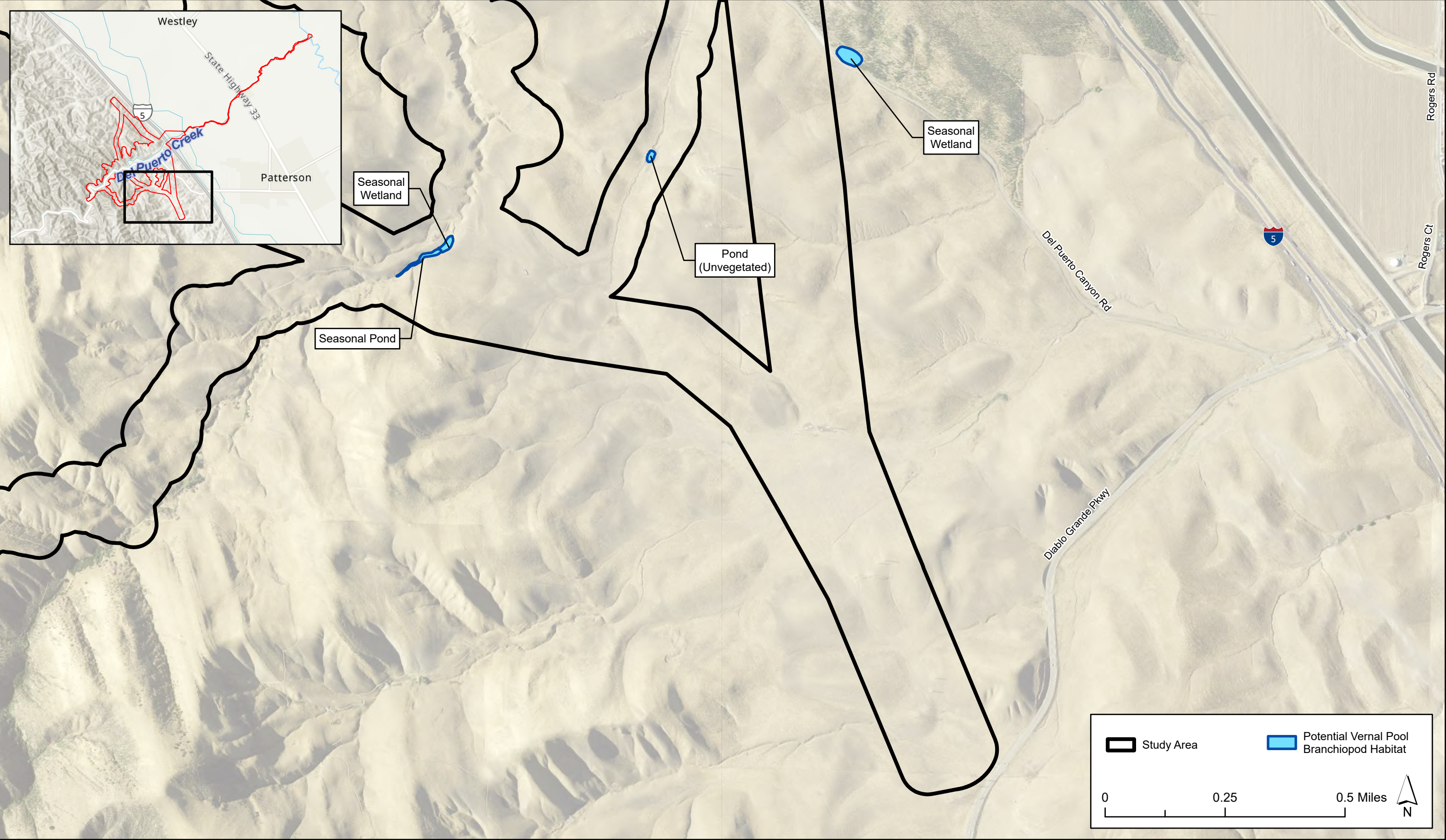


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Modeled Vernal Pool Branchiopod Habitat

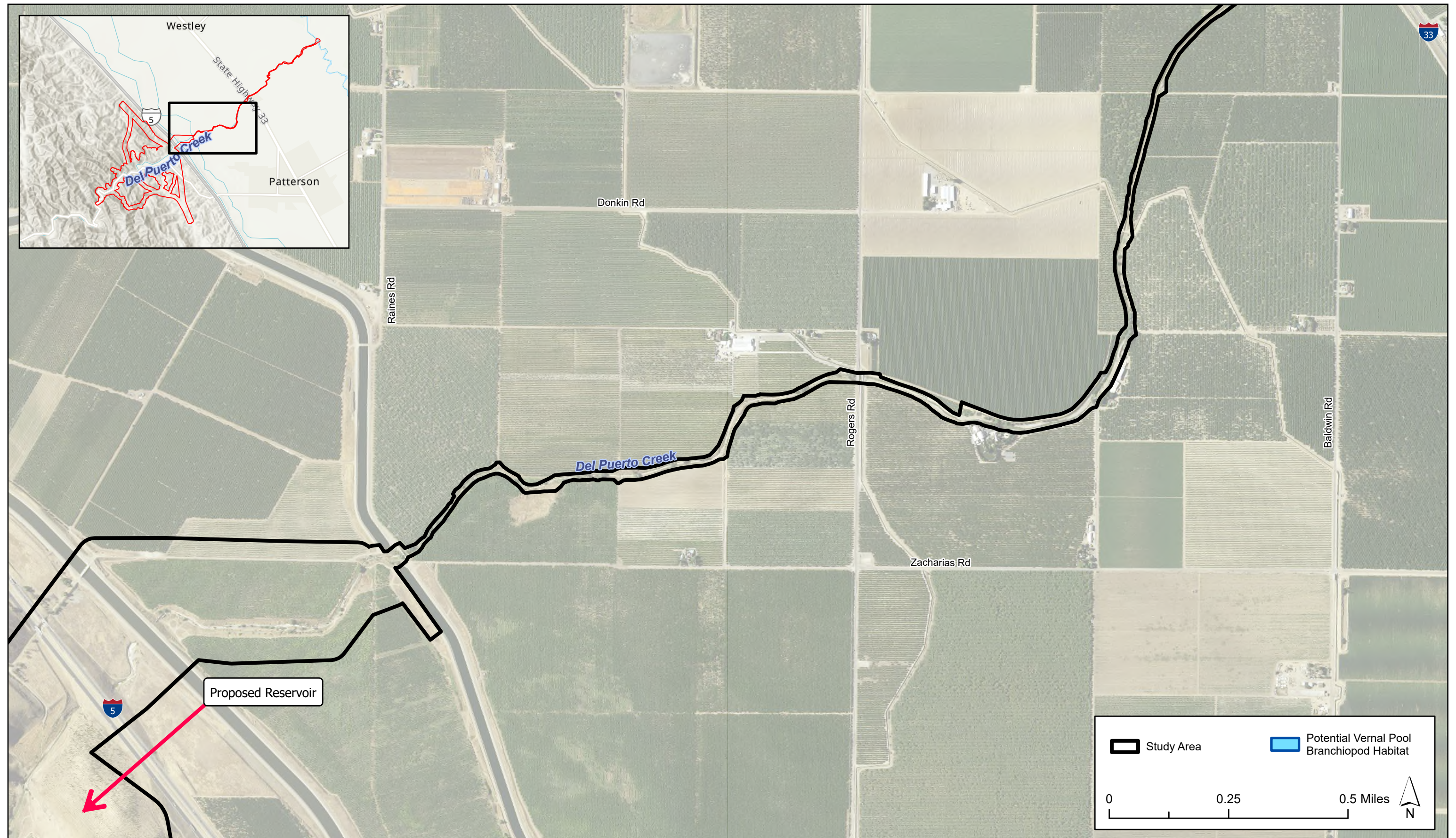


Figure 17
Modeled Vernal Pool Branchiopod Habitat

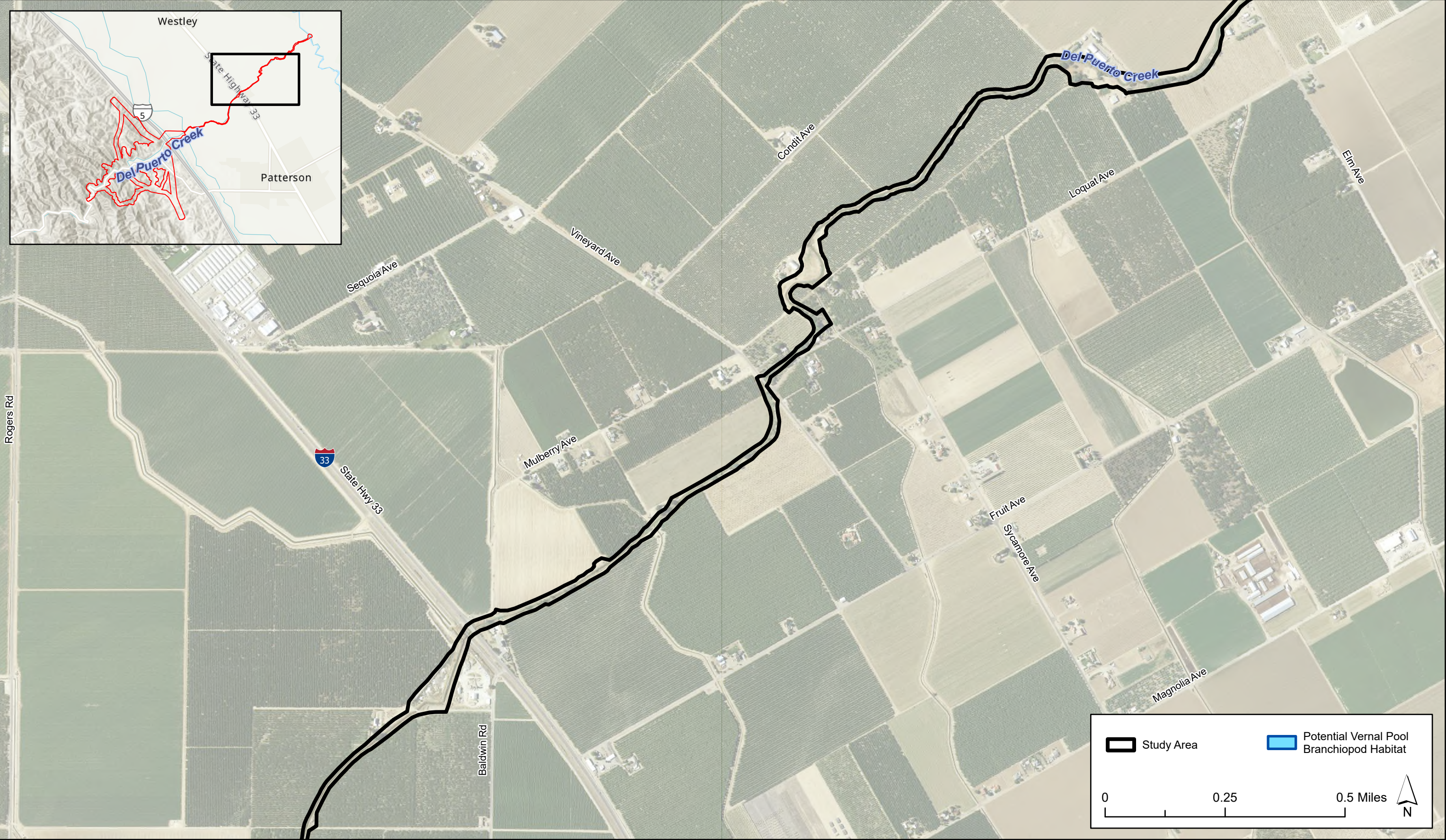


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Modeled Vernal Pool Branchiopod Habitat

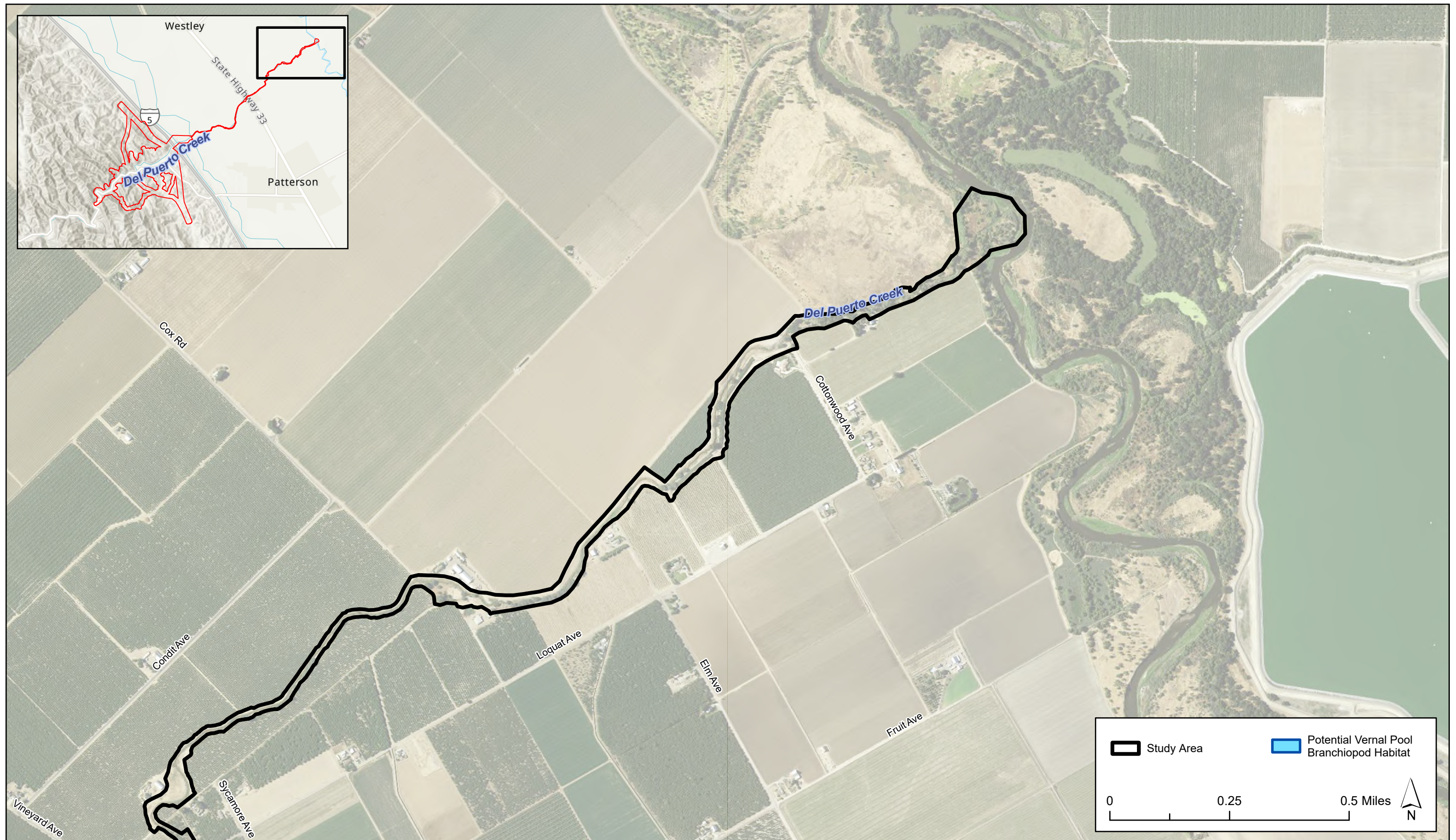


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Modeled Vernal Pool Branchiopod Habitat

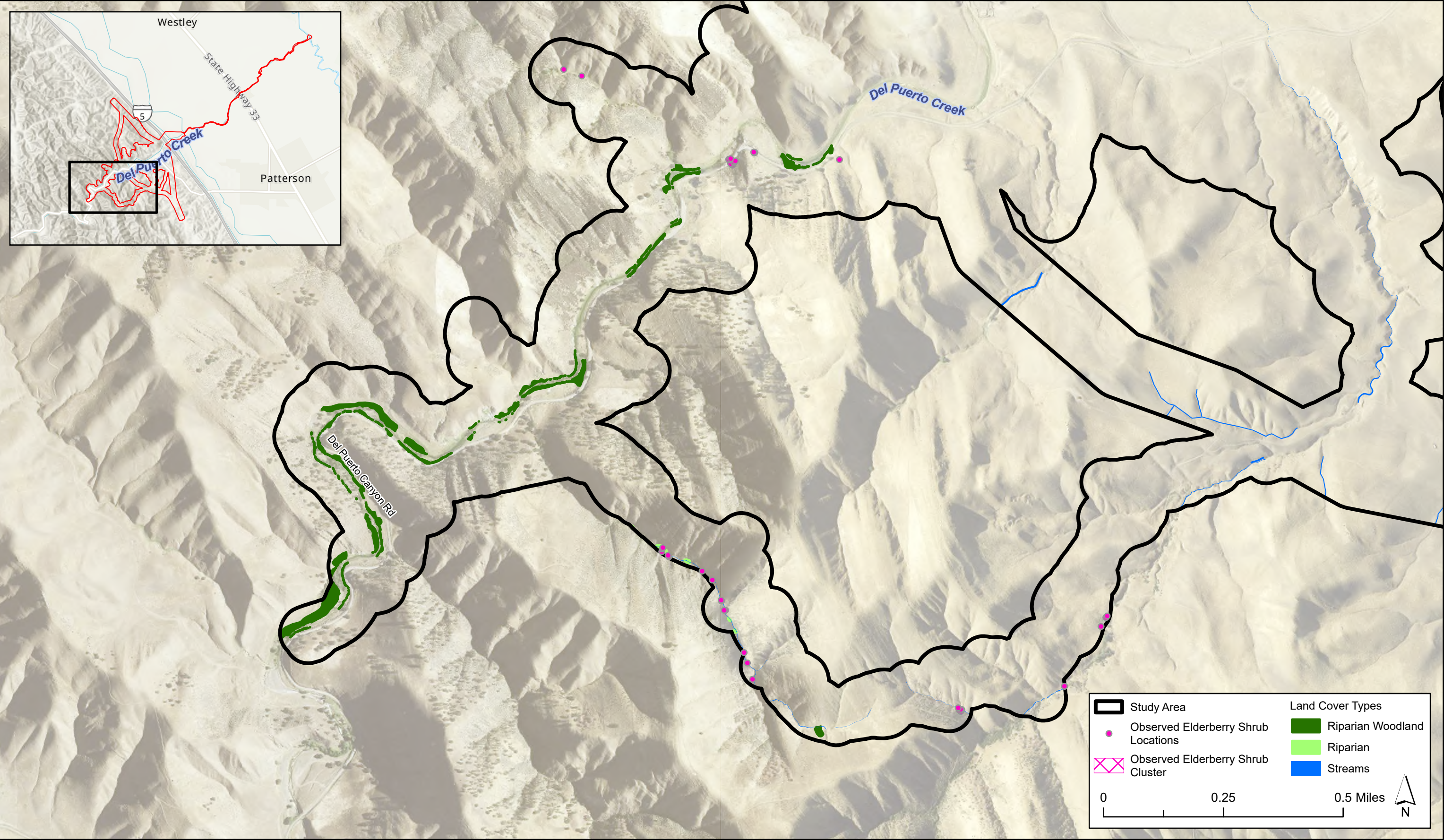


Figure 18
Elderberry Shrub Locations

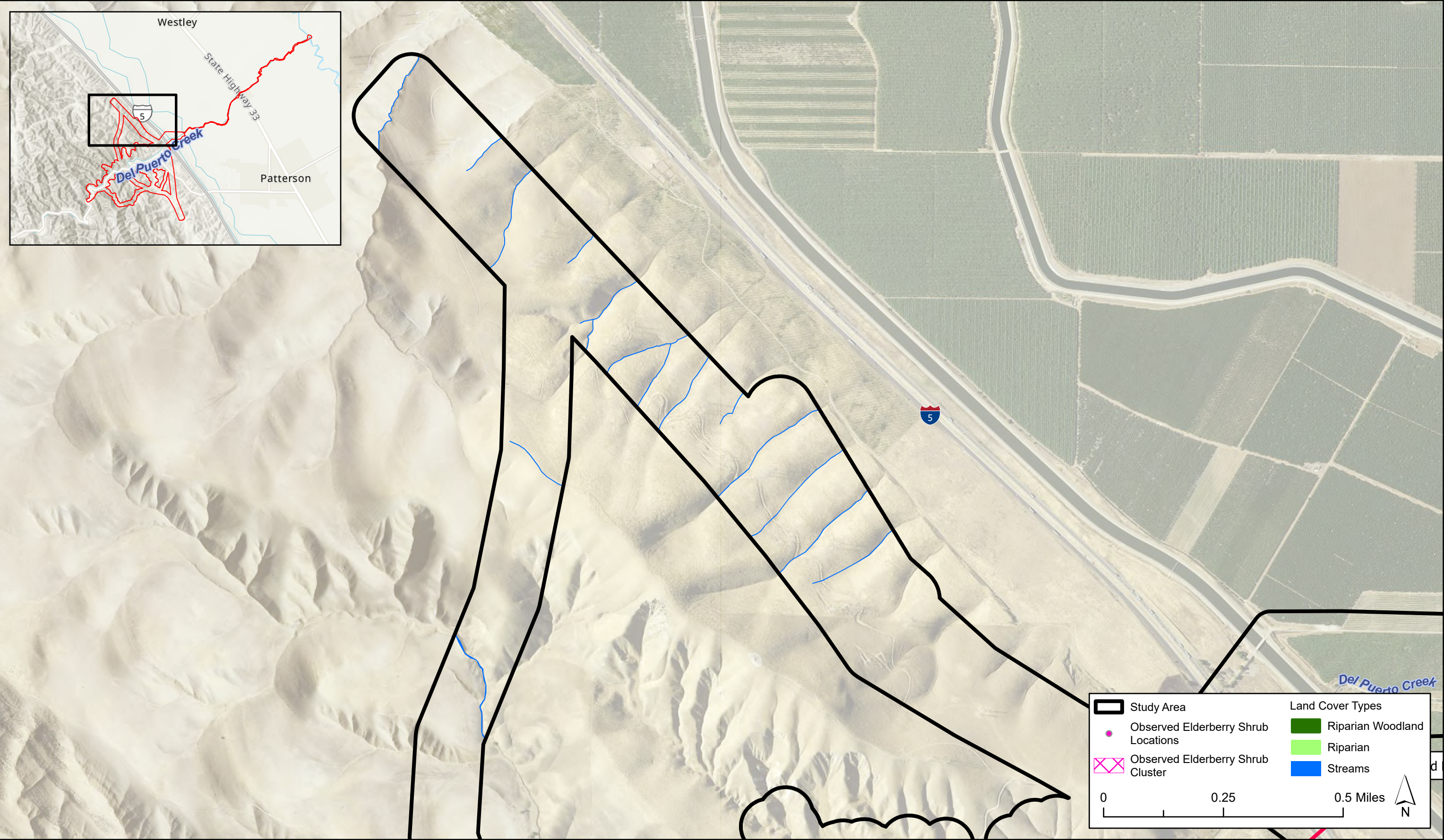


Figure 18
Elderberry Shrub Locations

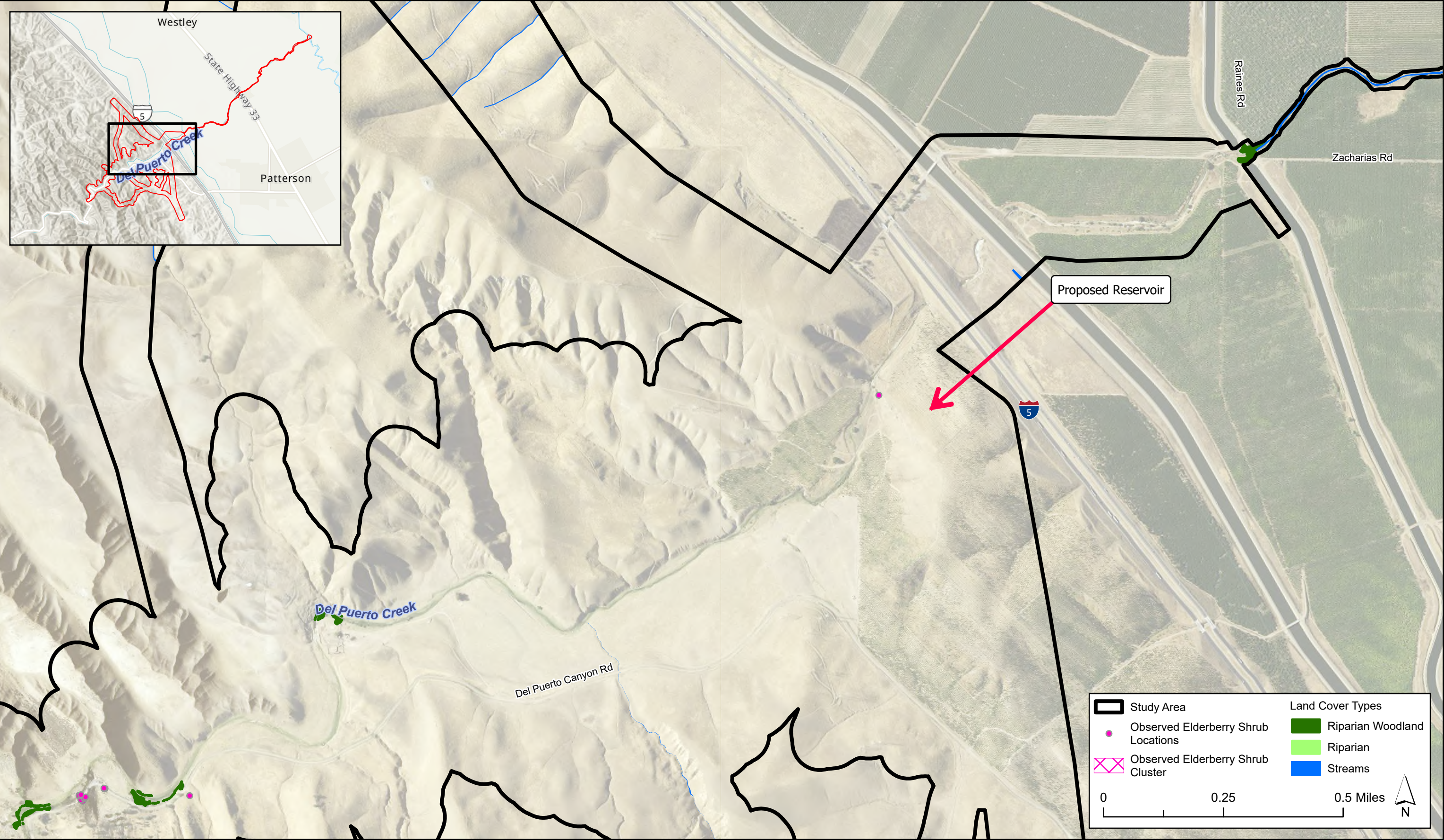


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Elderberry Shrub Locations

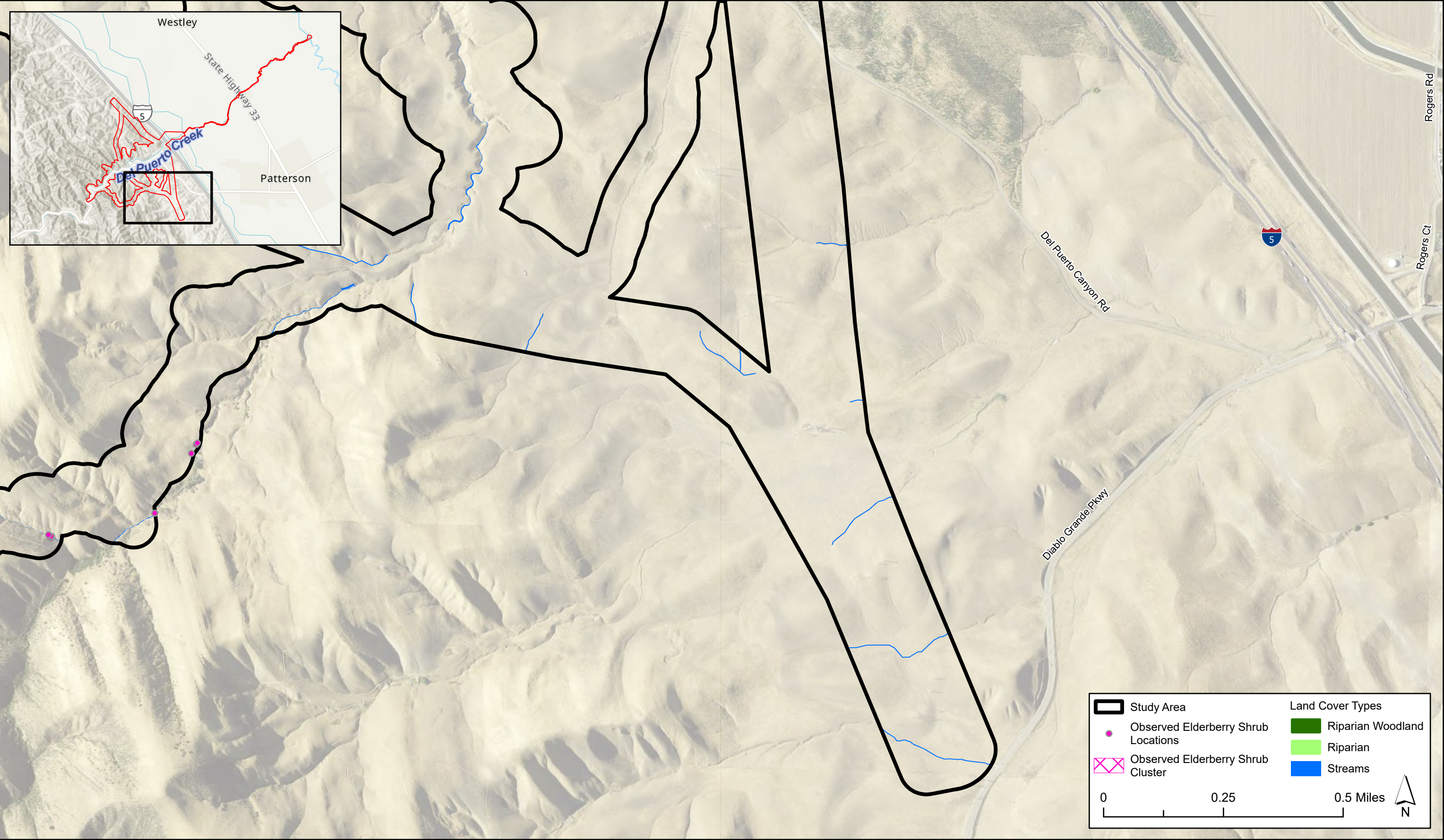


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Elderberry Shrub Locations

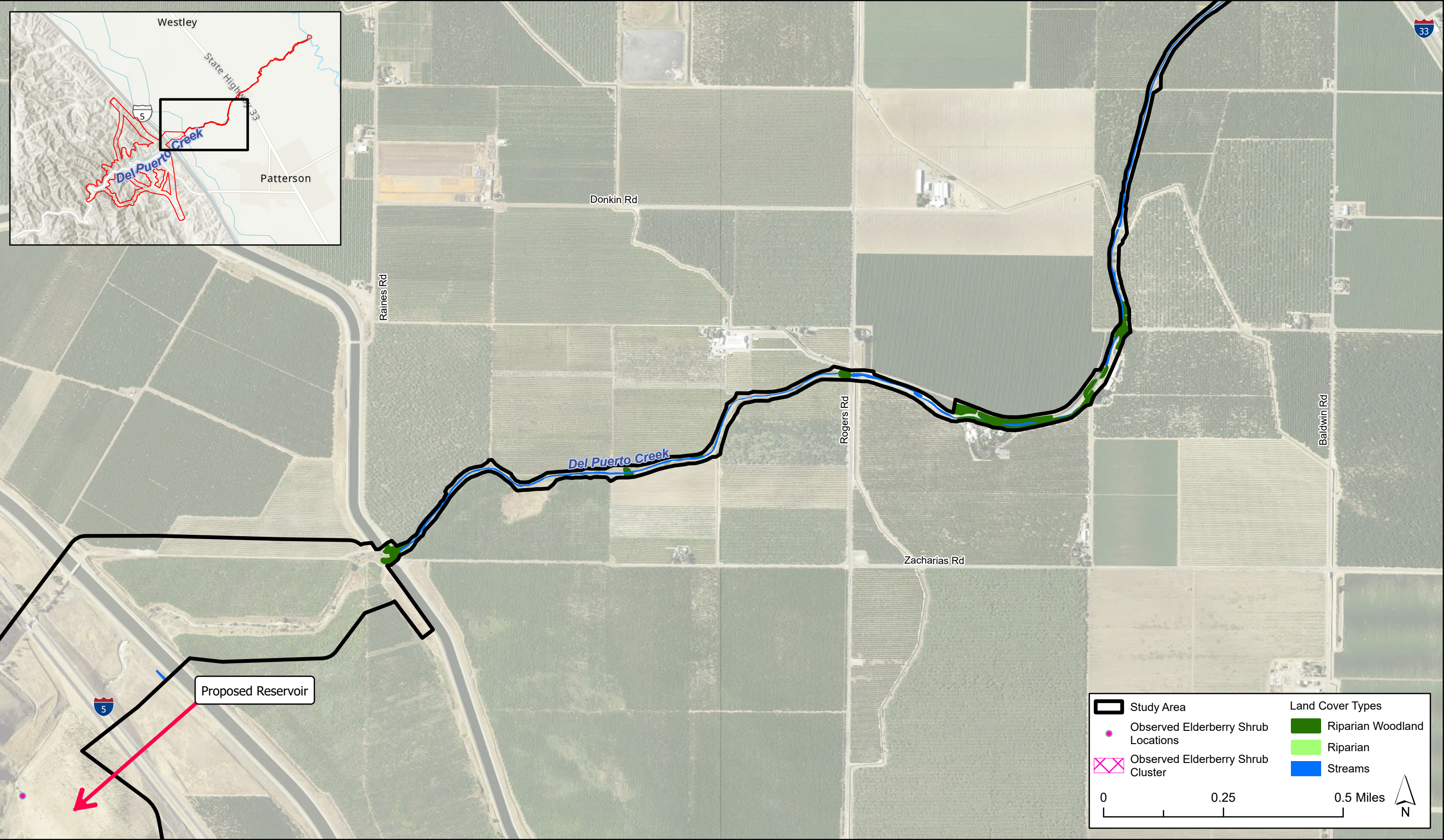


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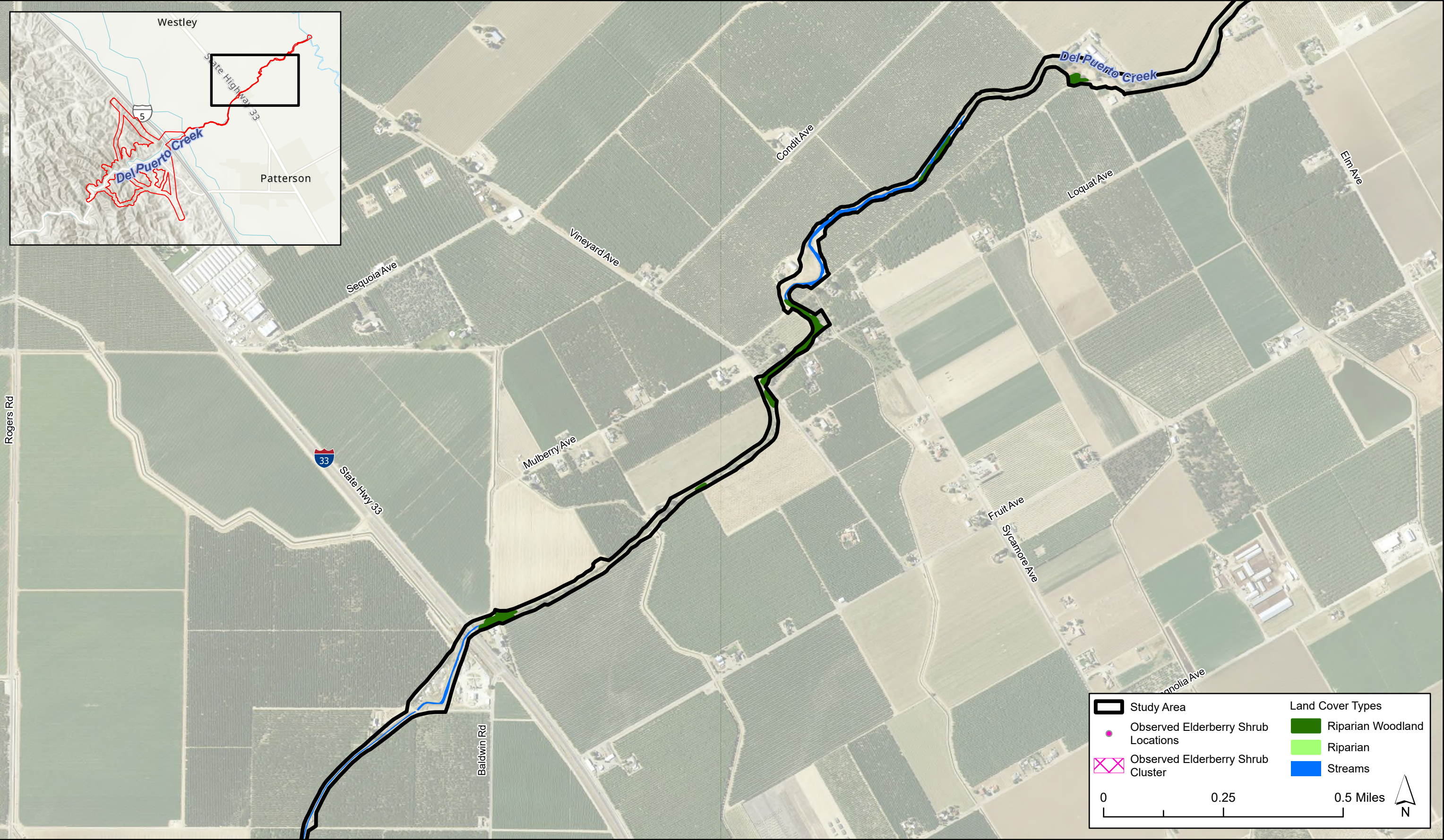


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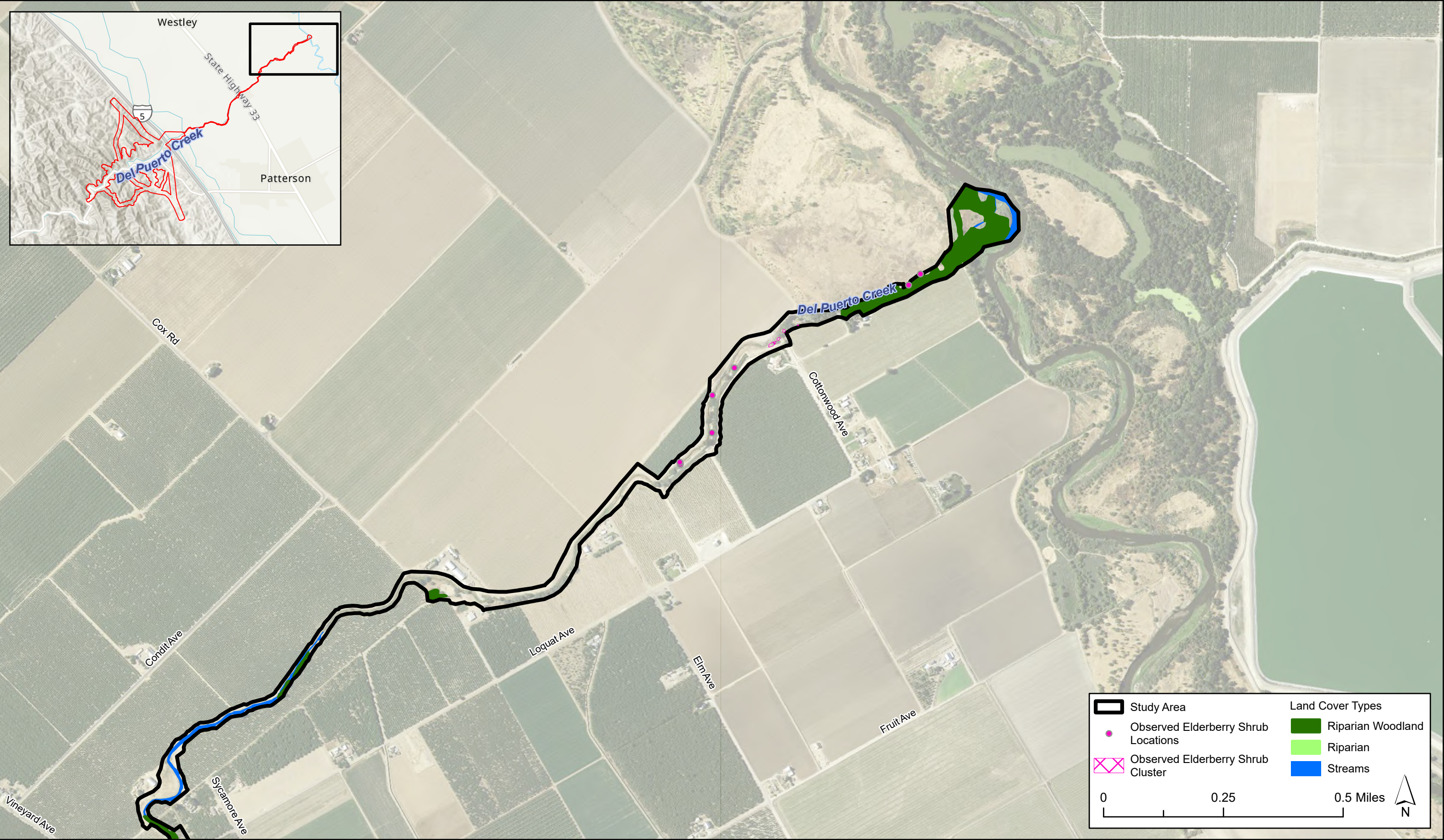


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Elderberry Shrub Locations

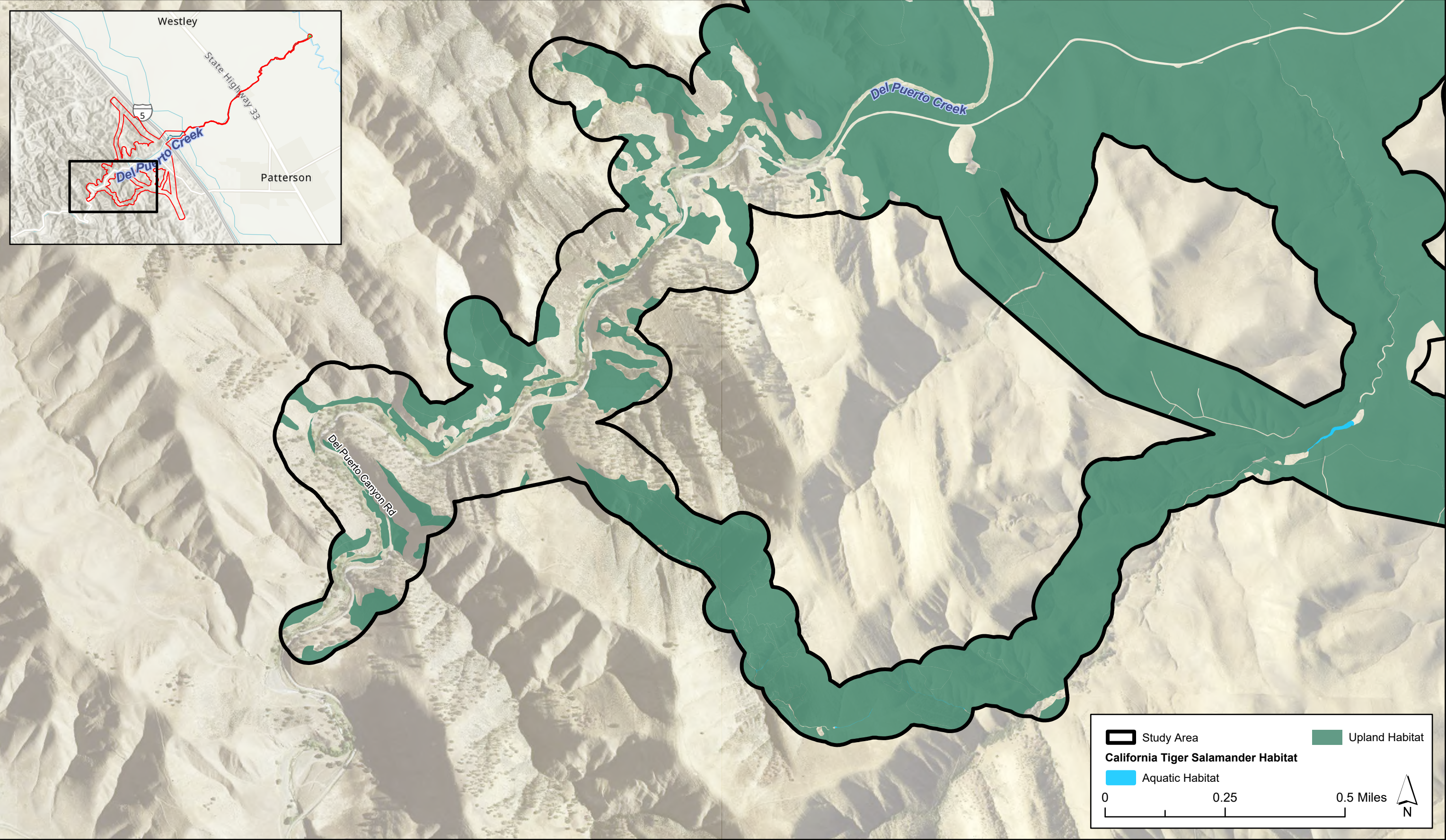


Figure 19
Modeled California Tiger Salamander Habitat

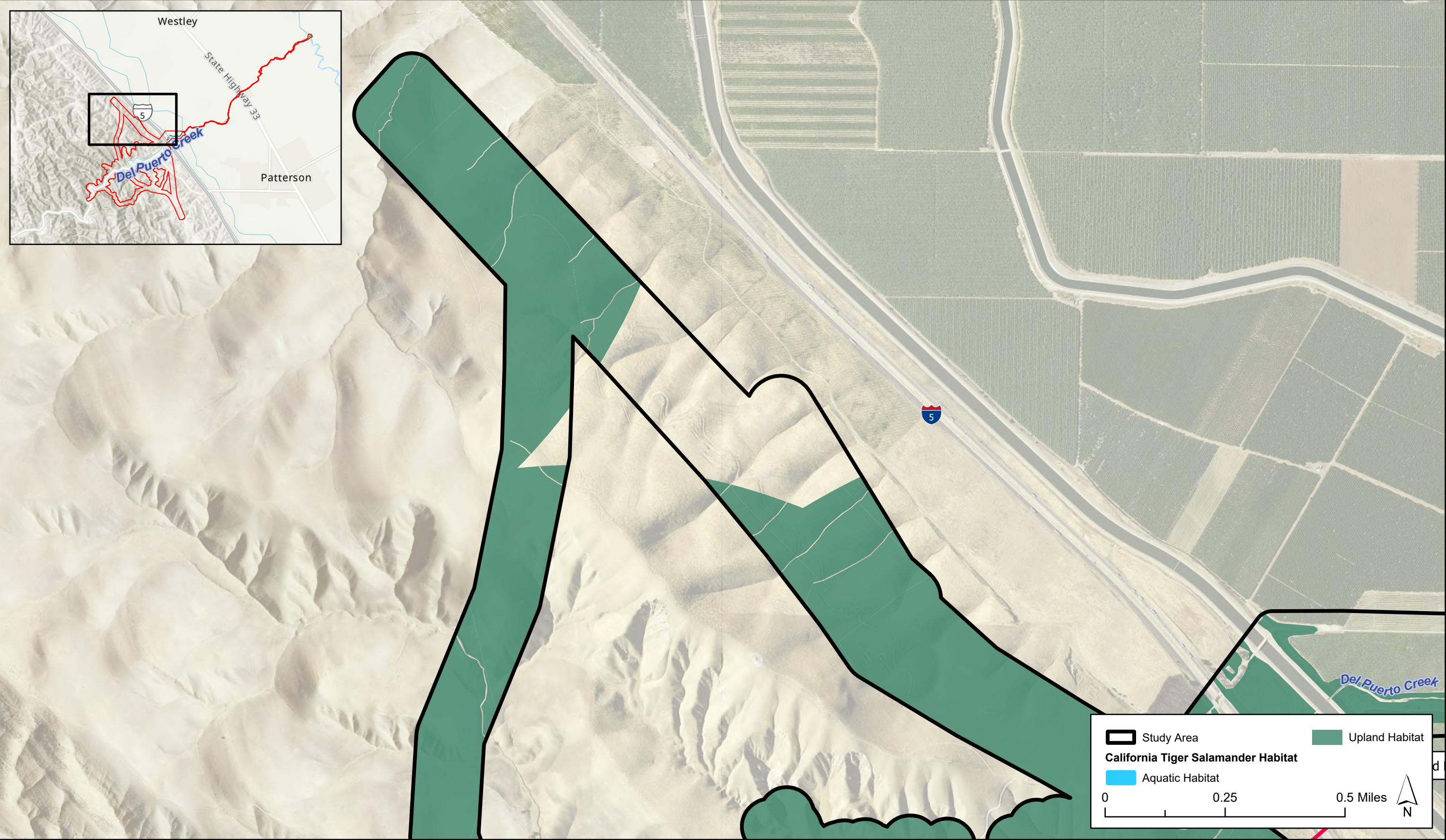


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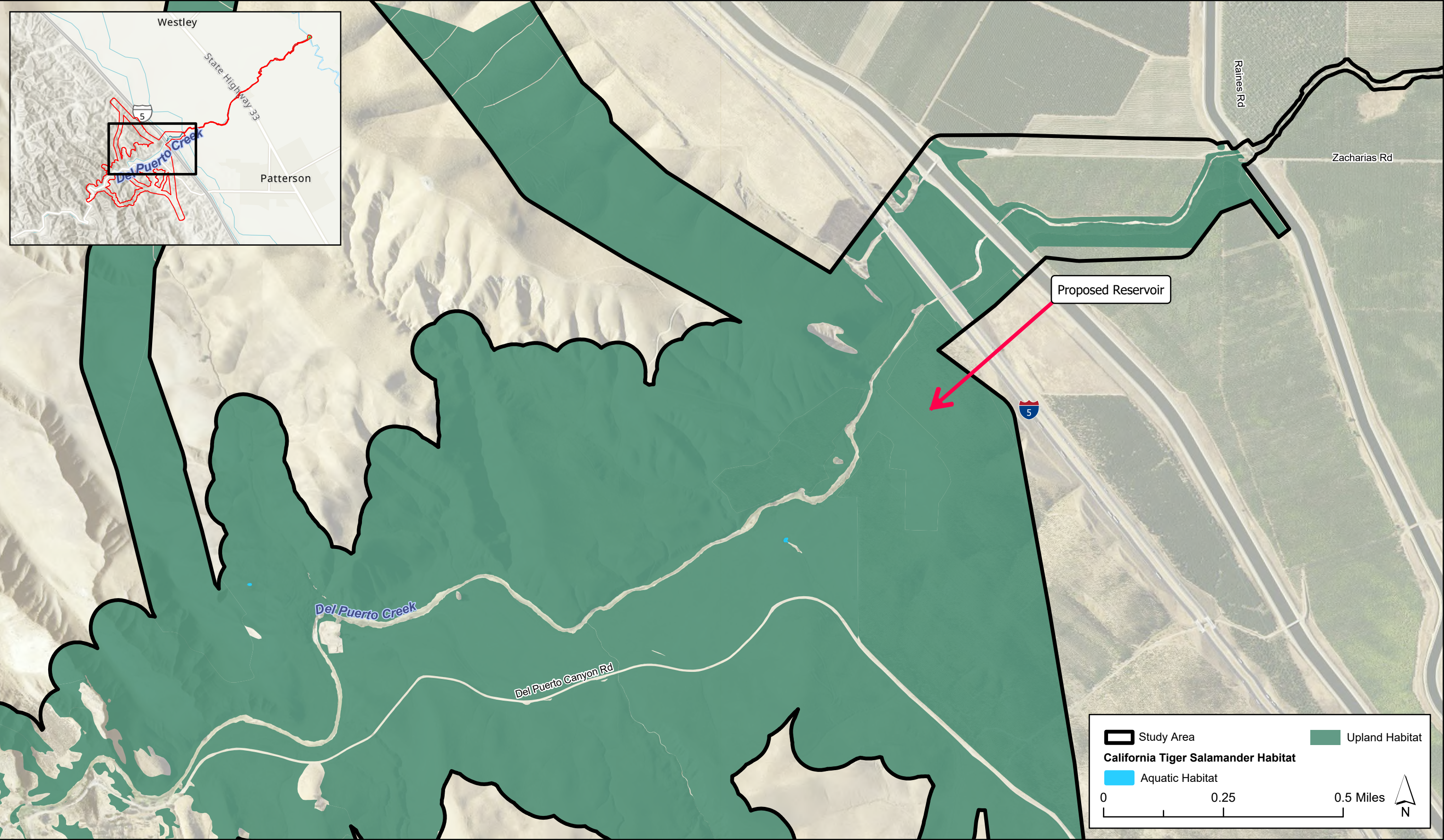


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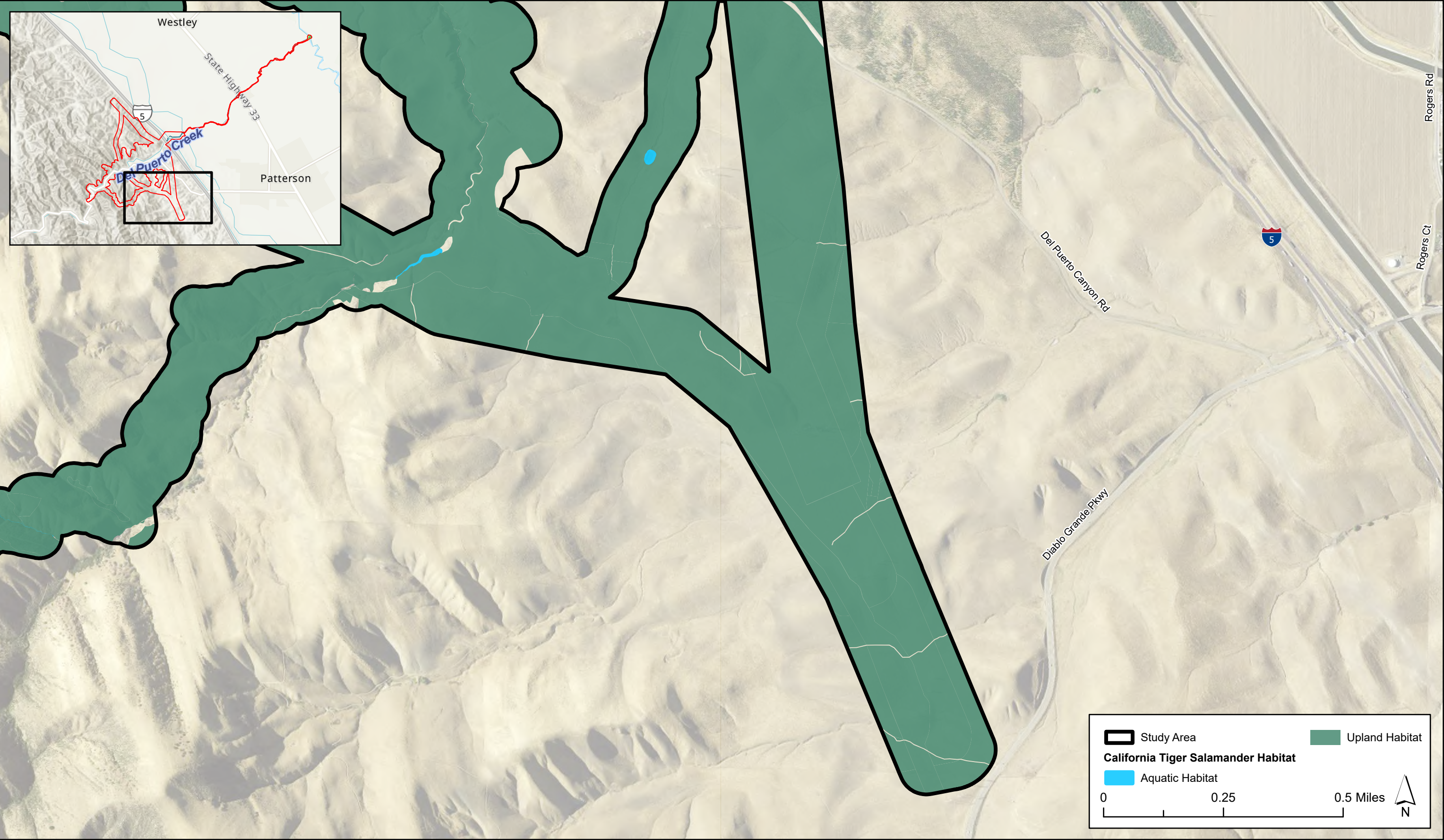


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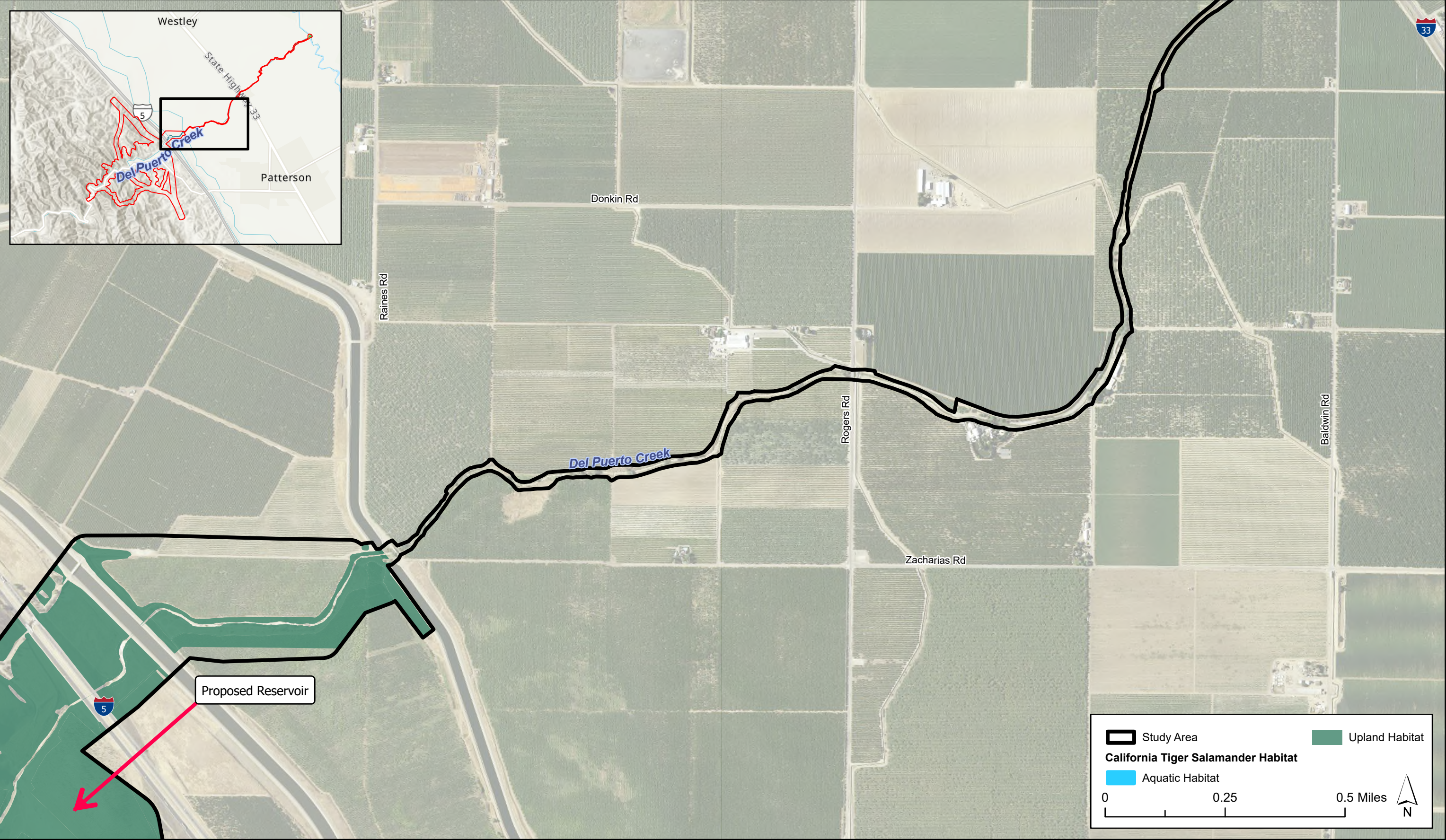


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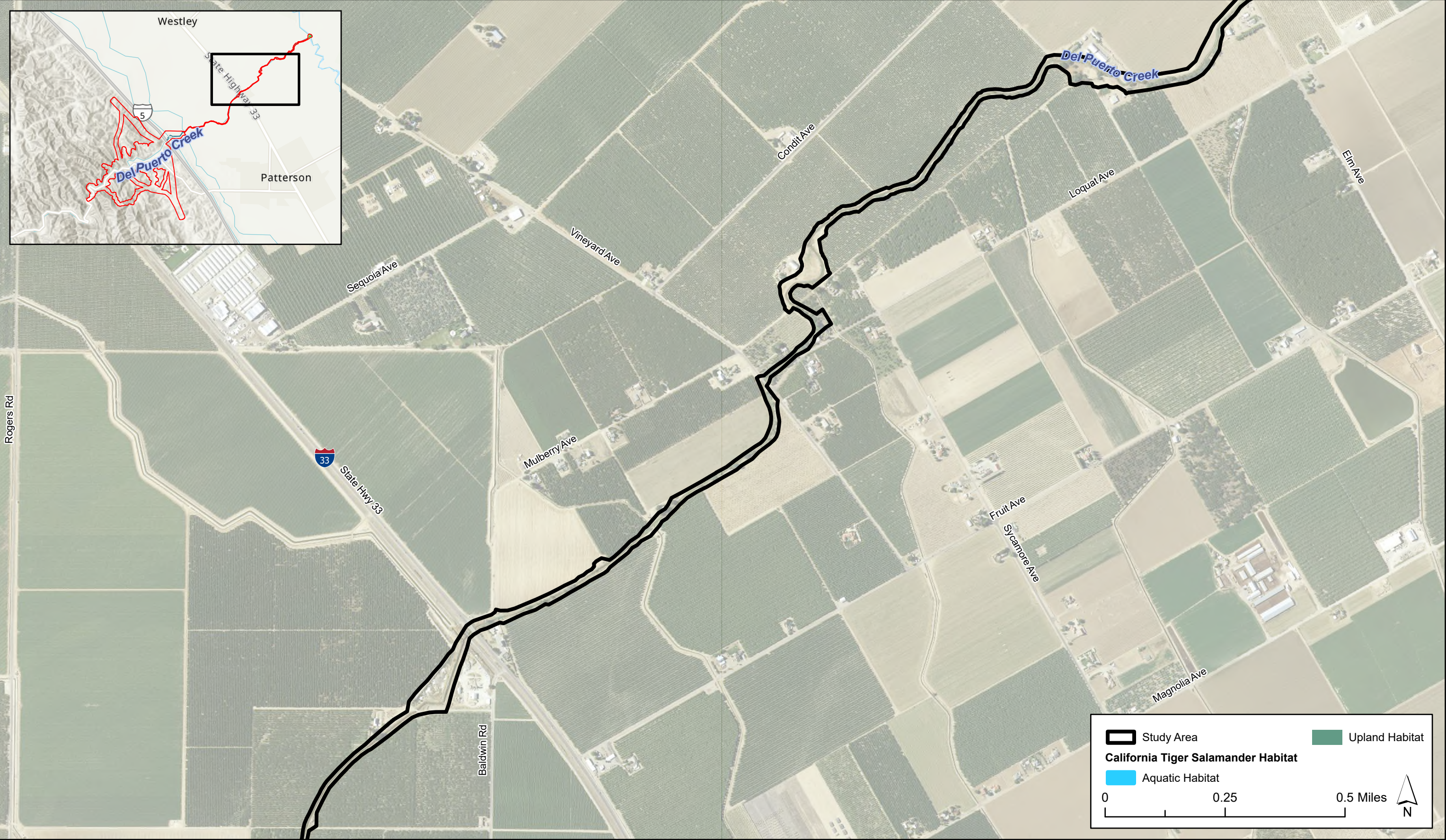


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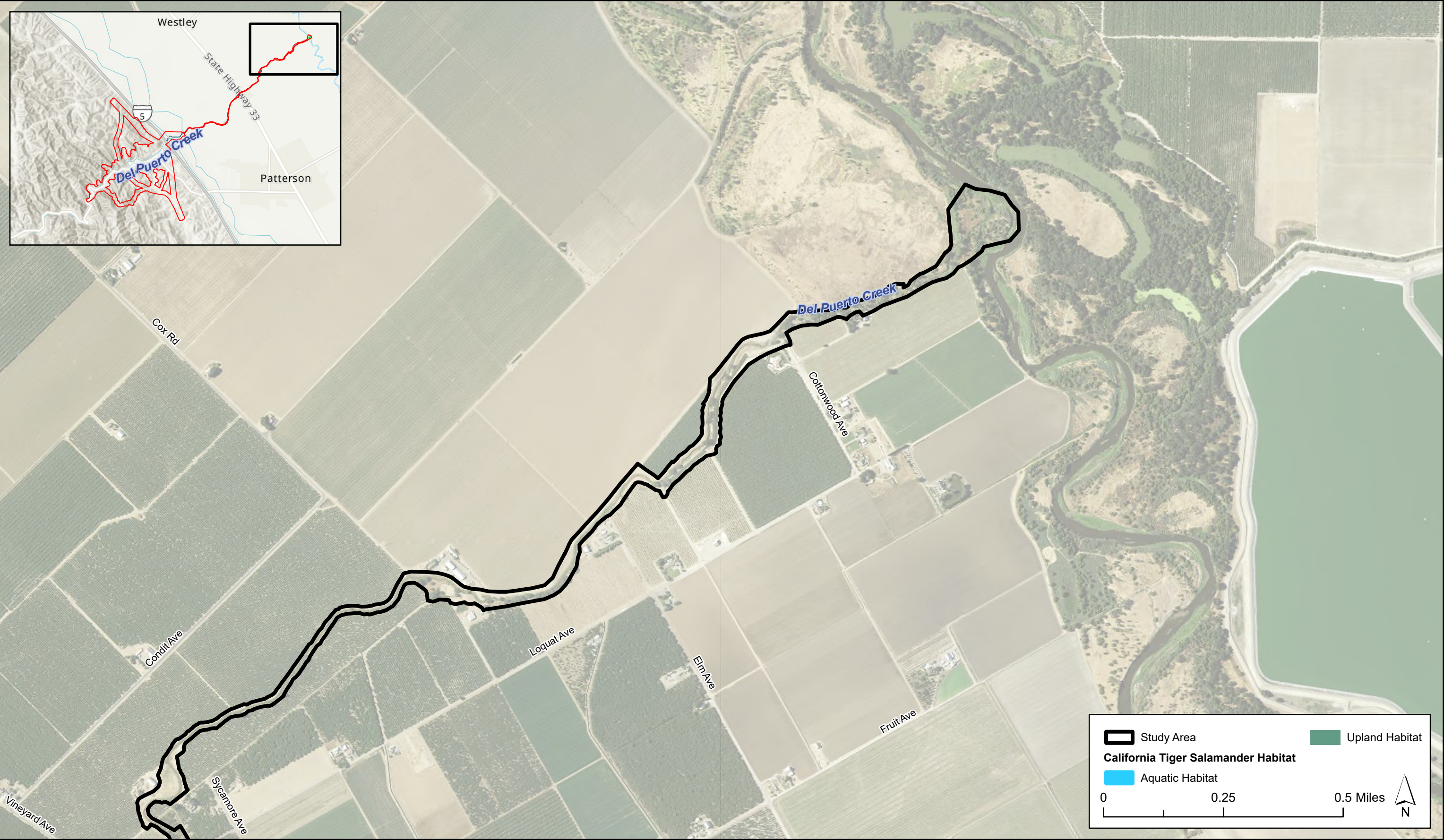


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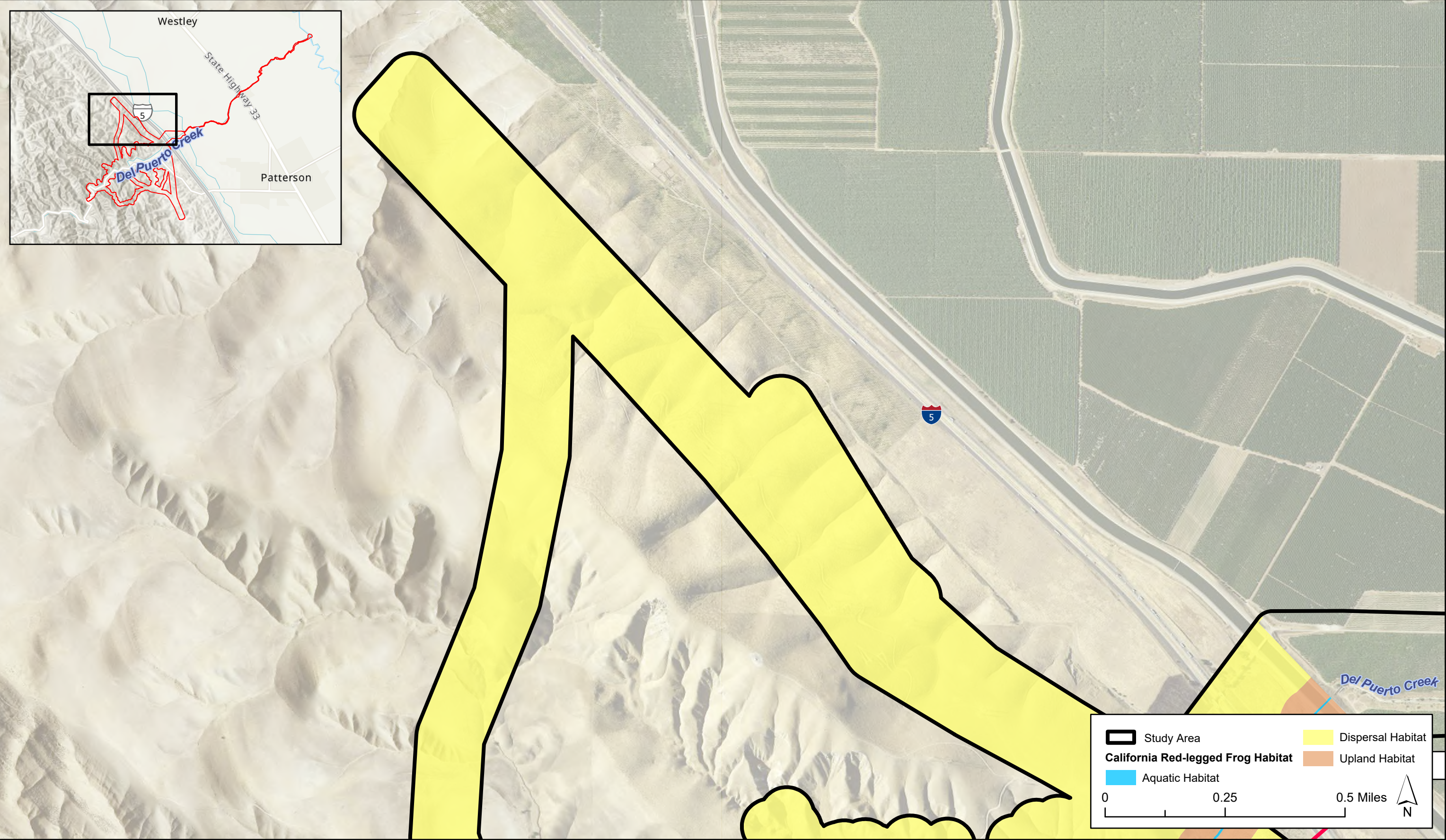


Figure 20
Modeled California Red-legged Frog Habitat

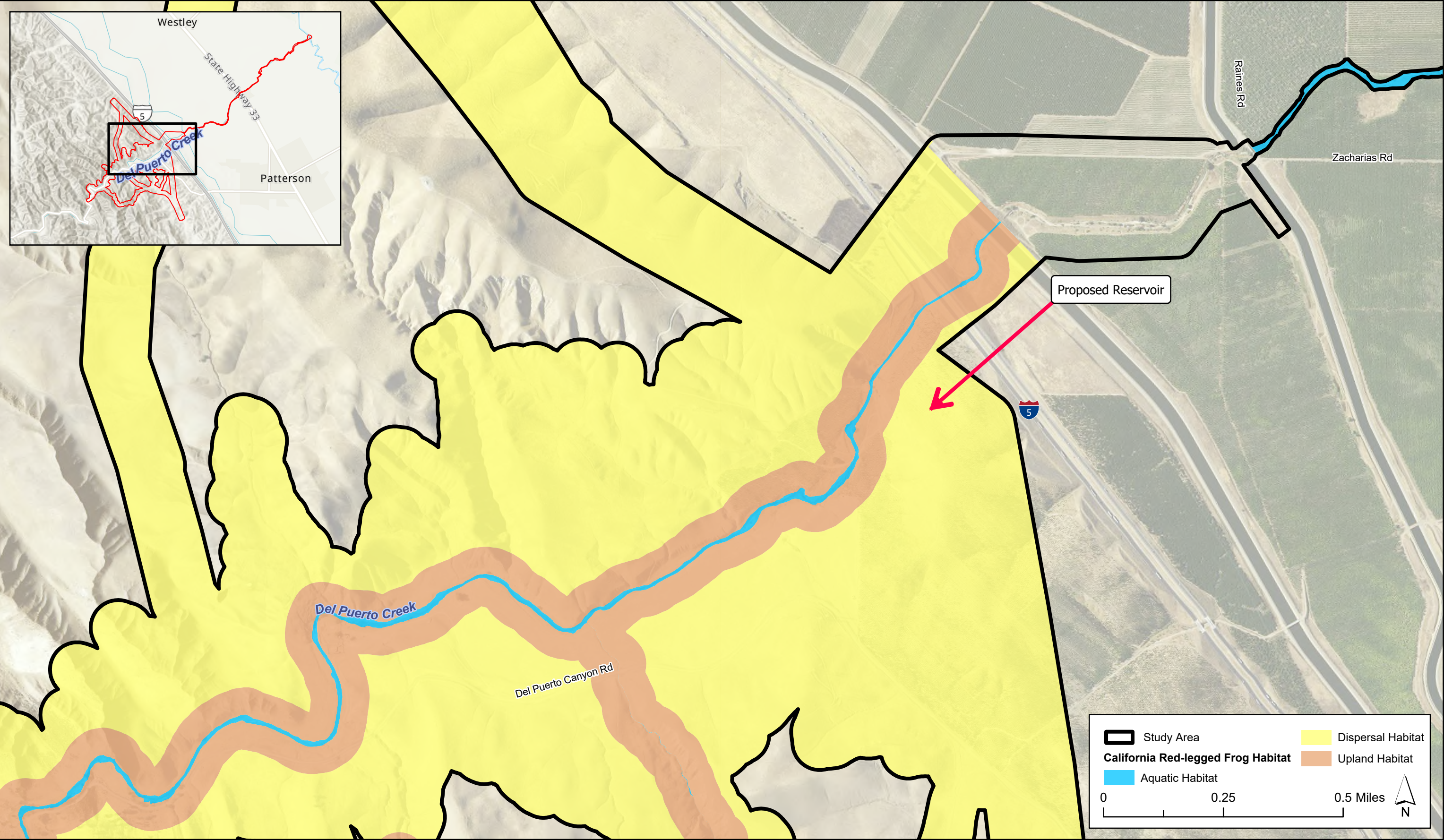


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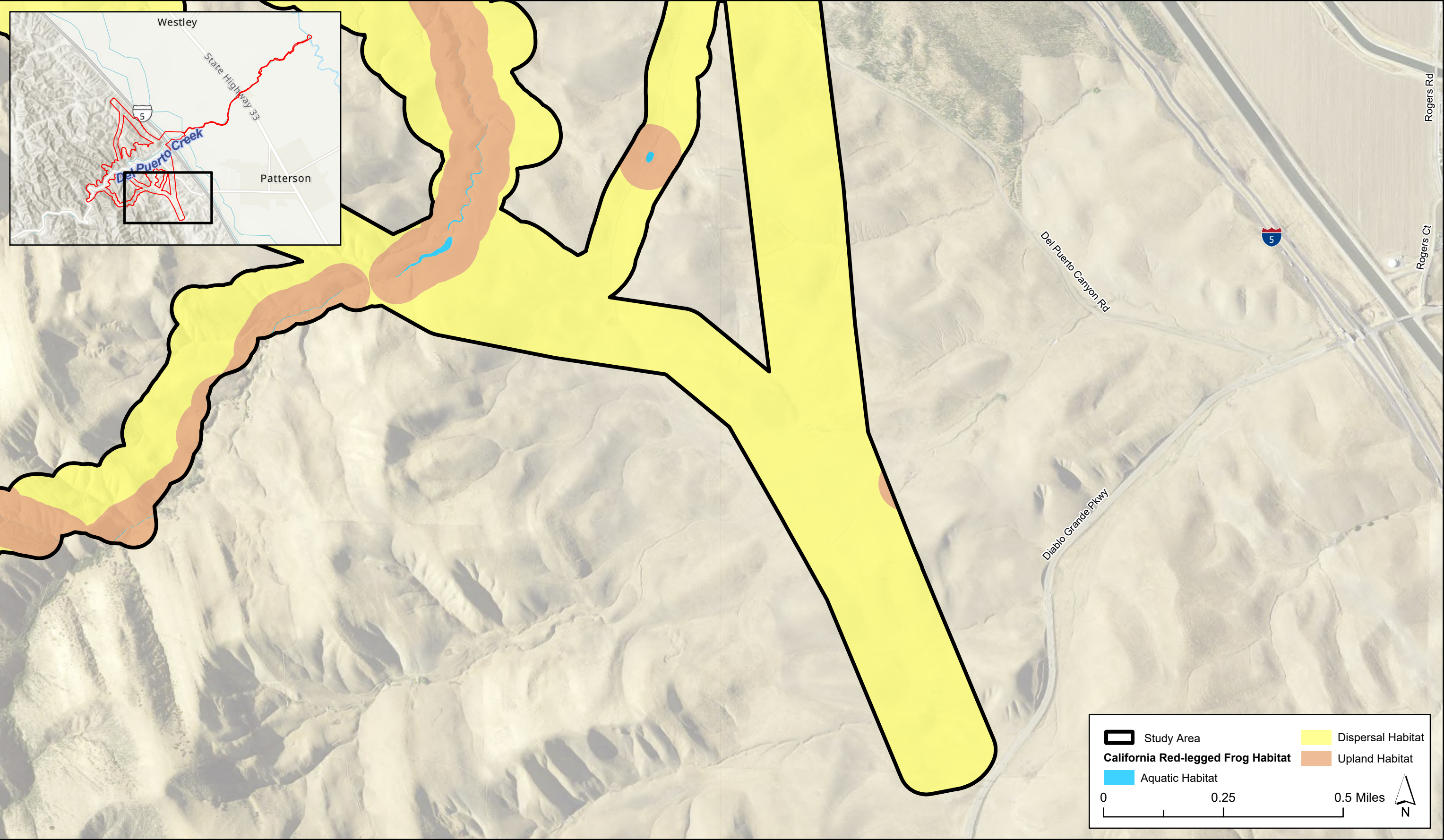


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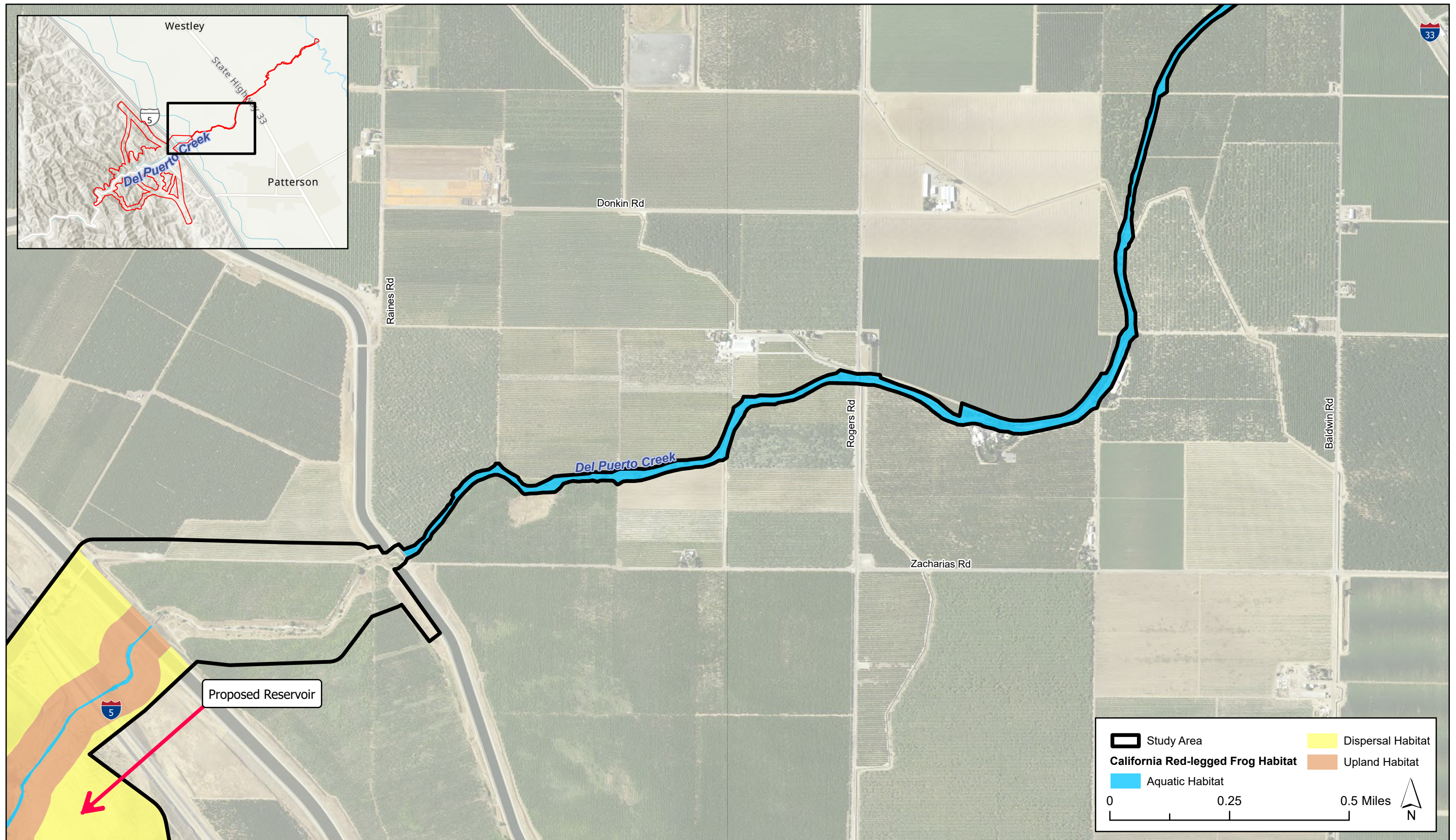


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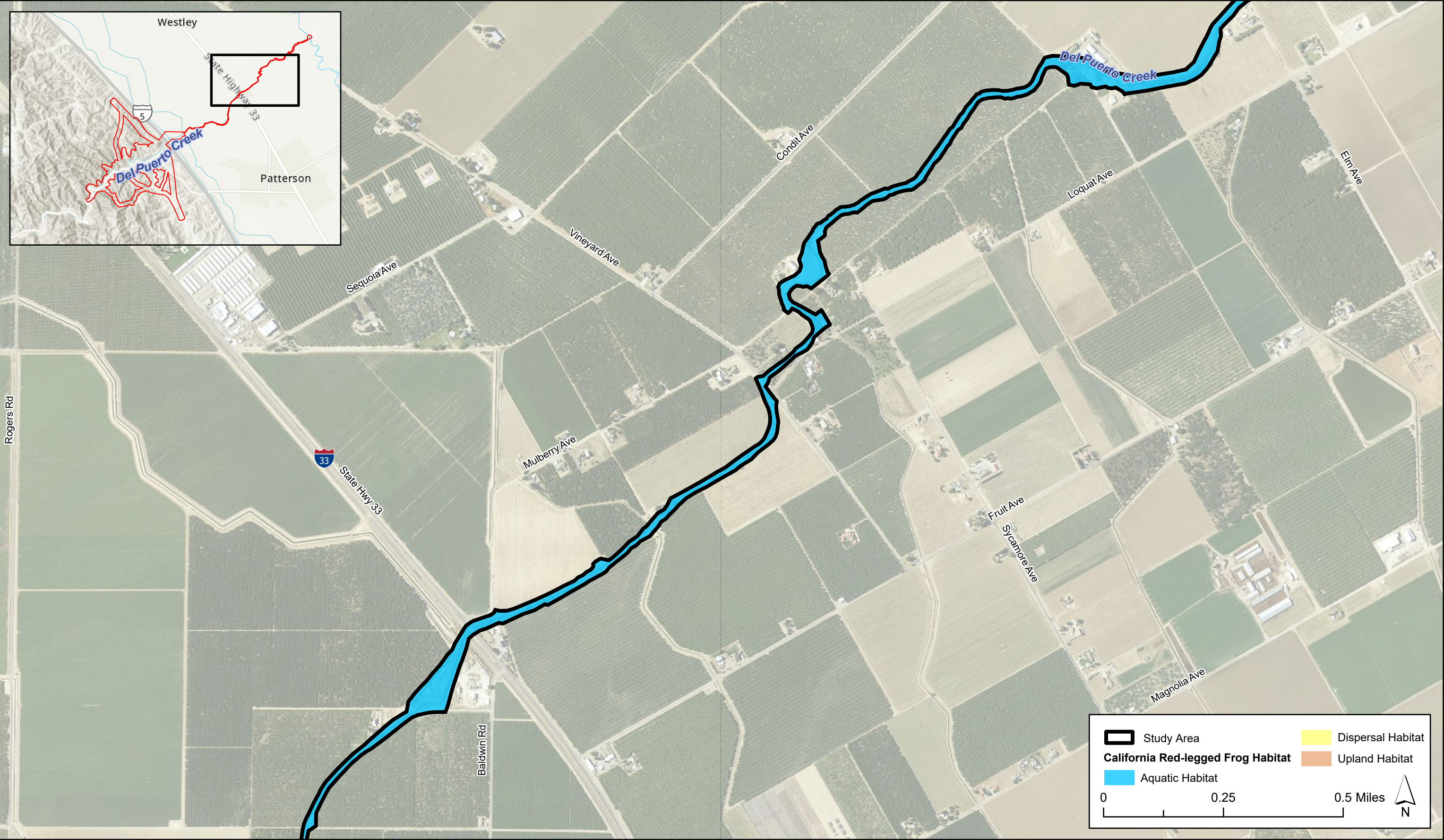


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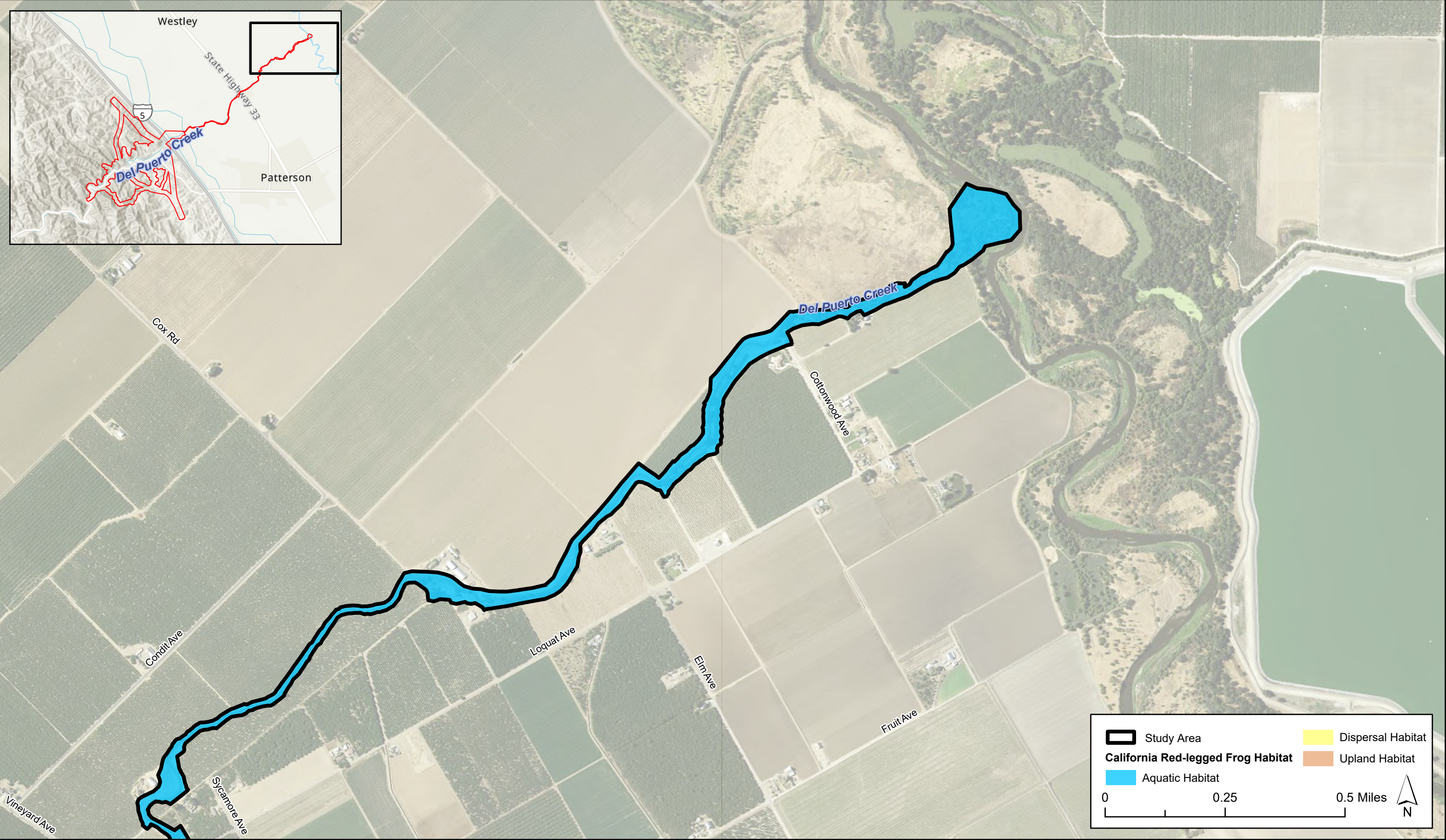


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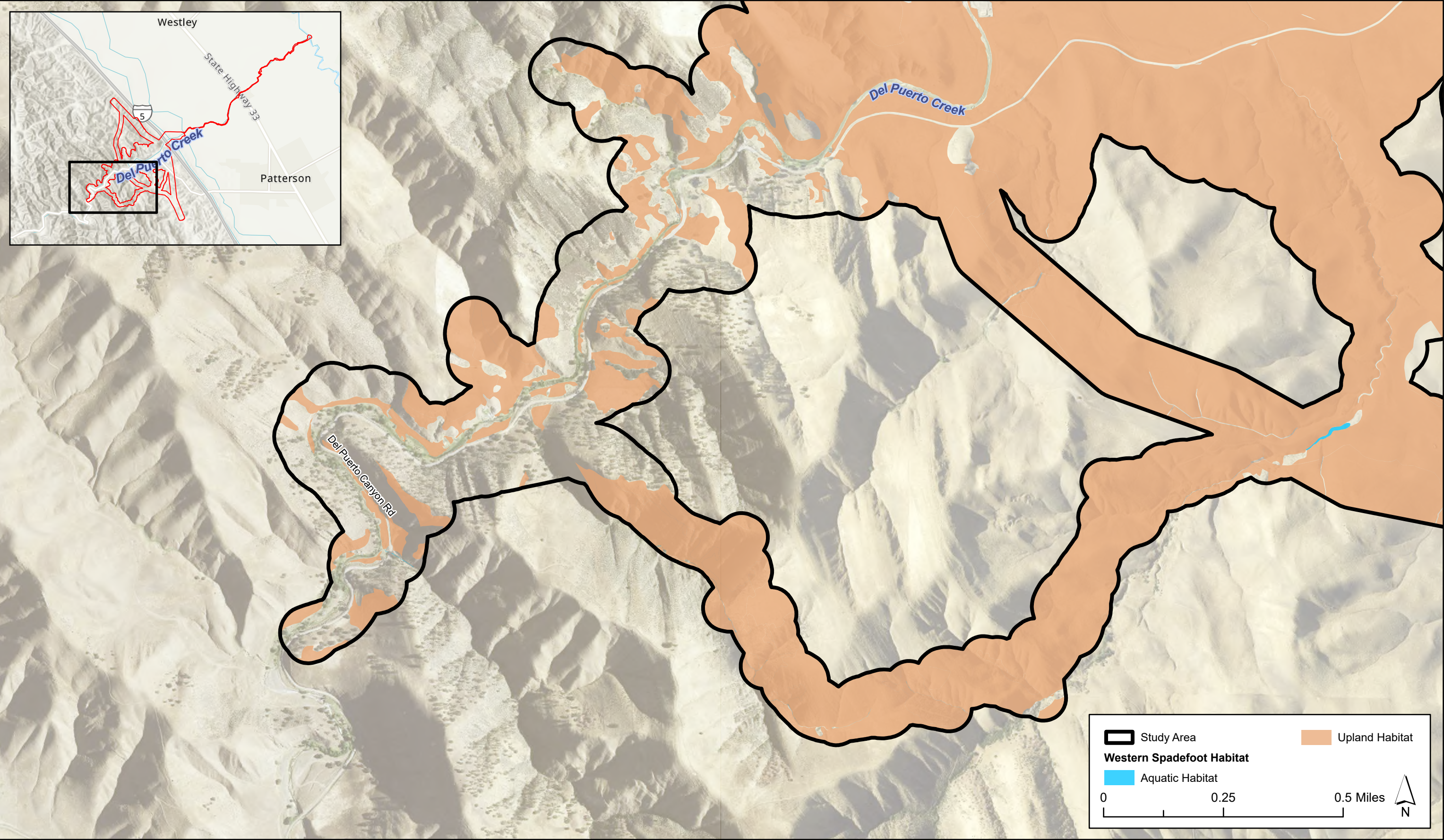


Figure 21
Modeled Western Spadefoot Habitat

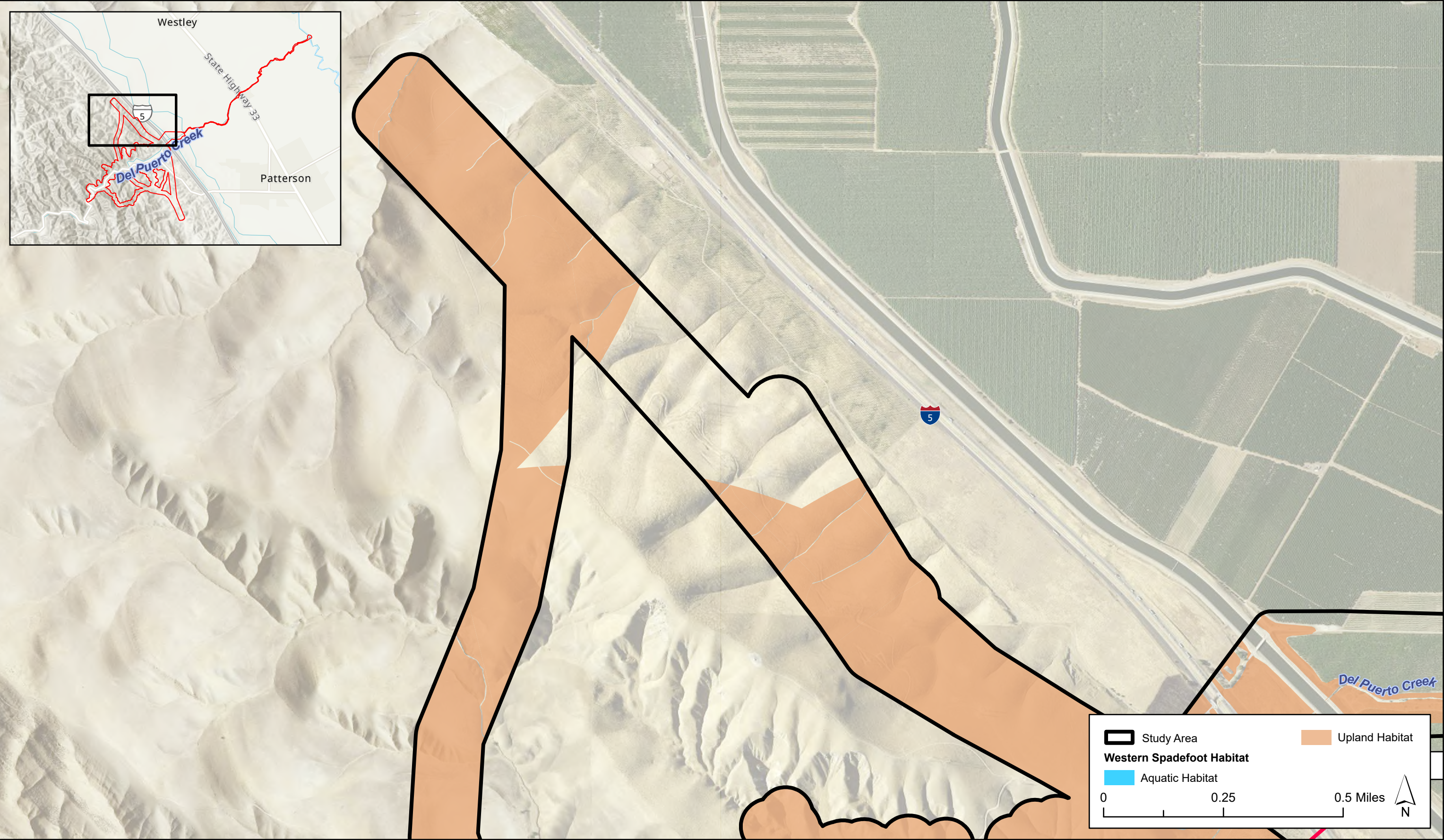


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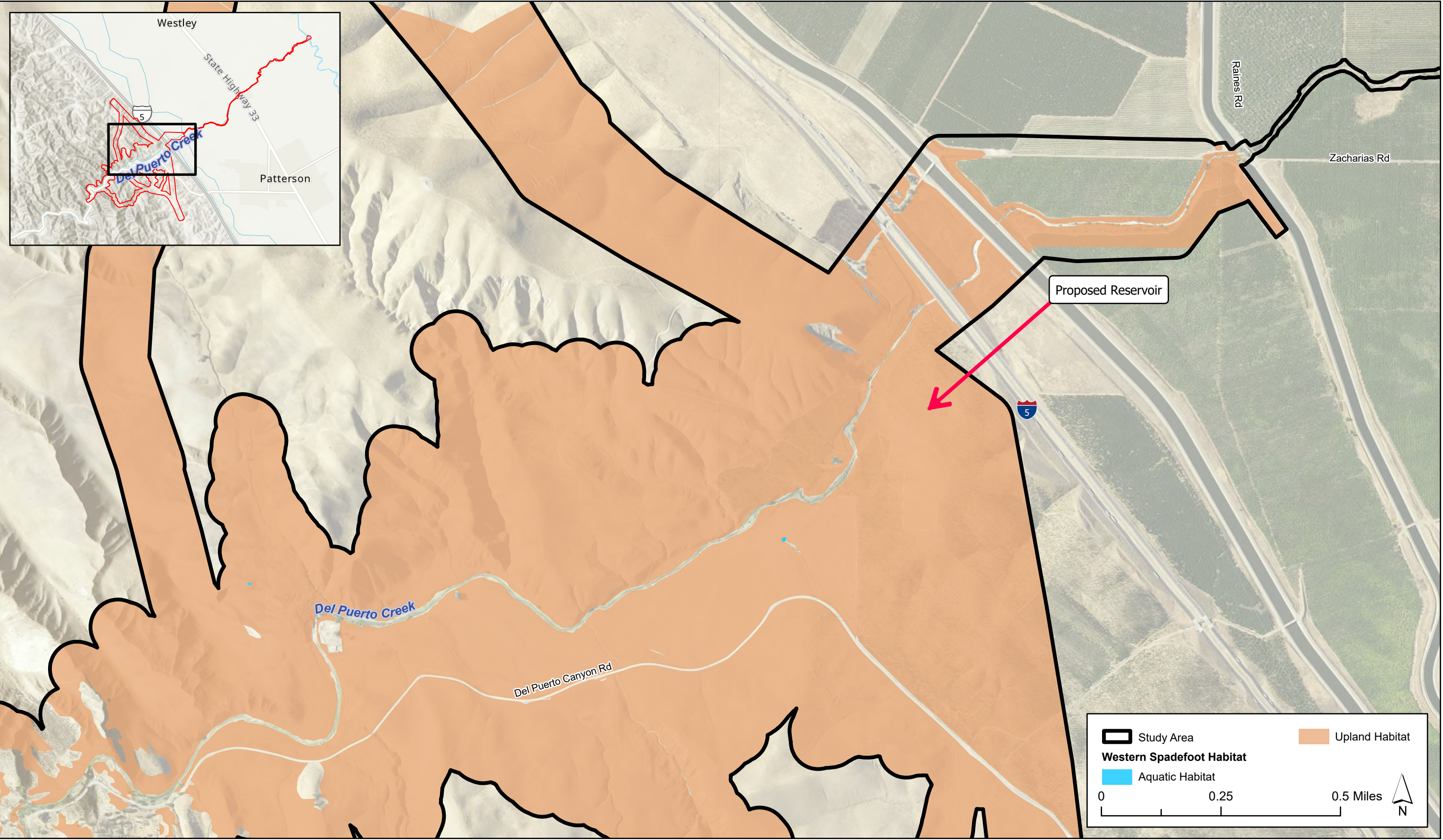


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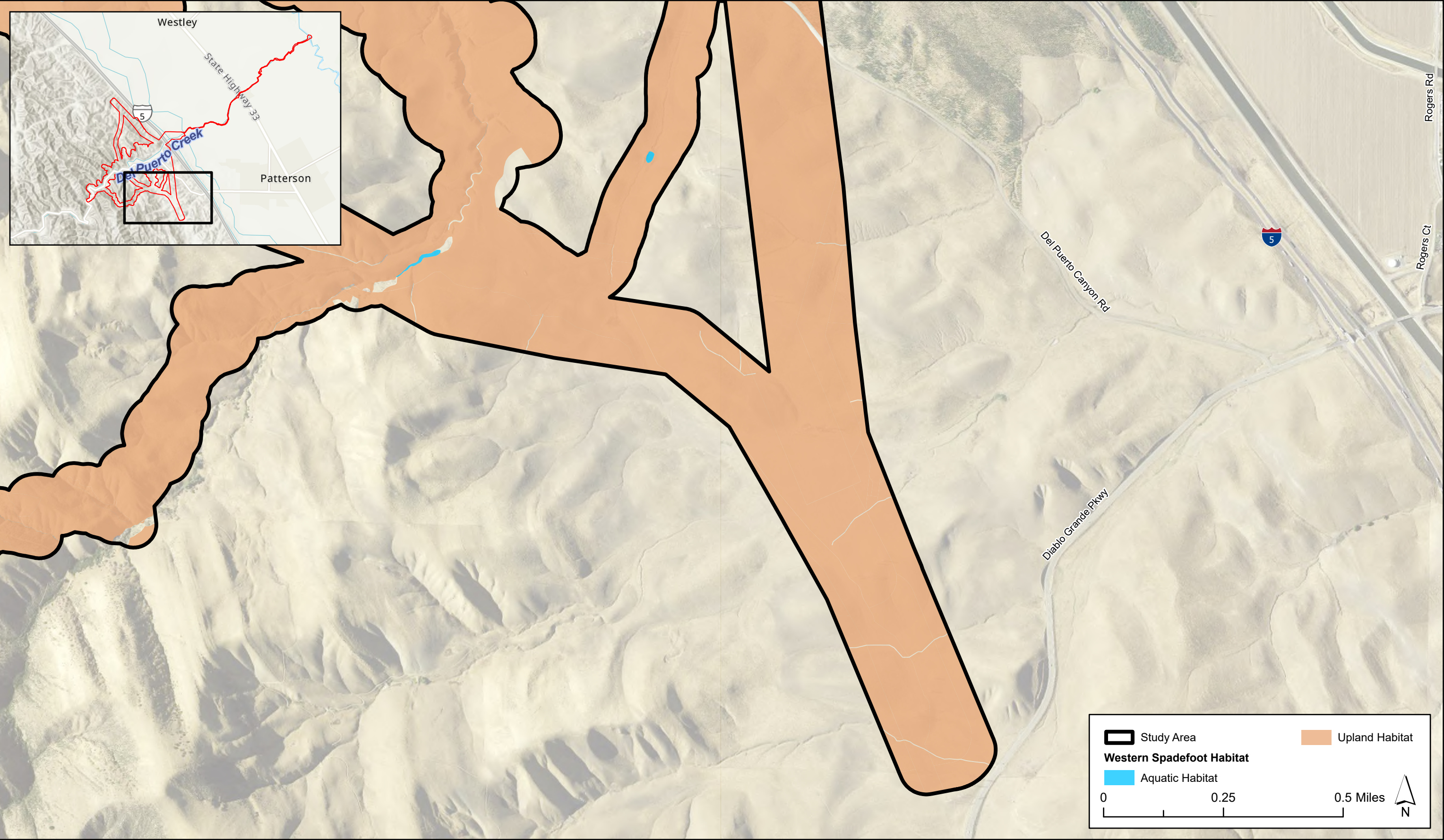


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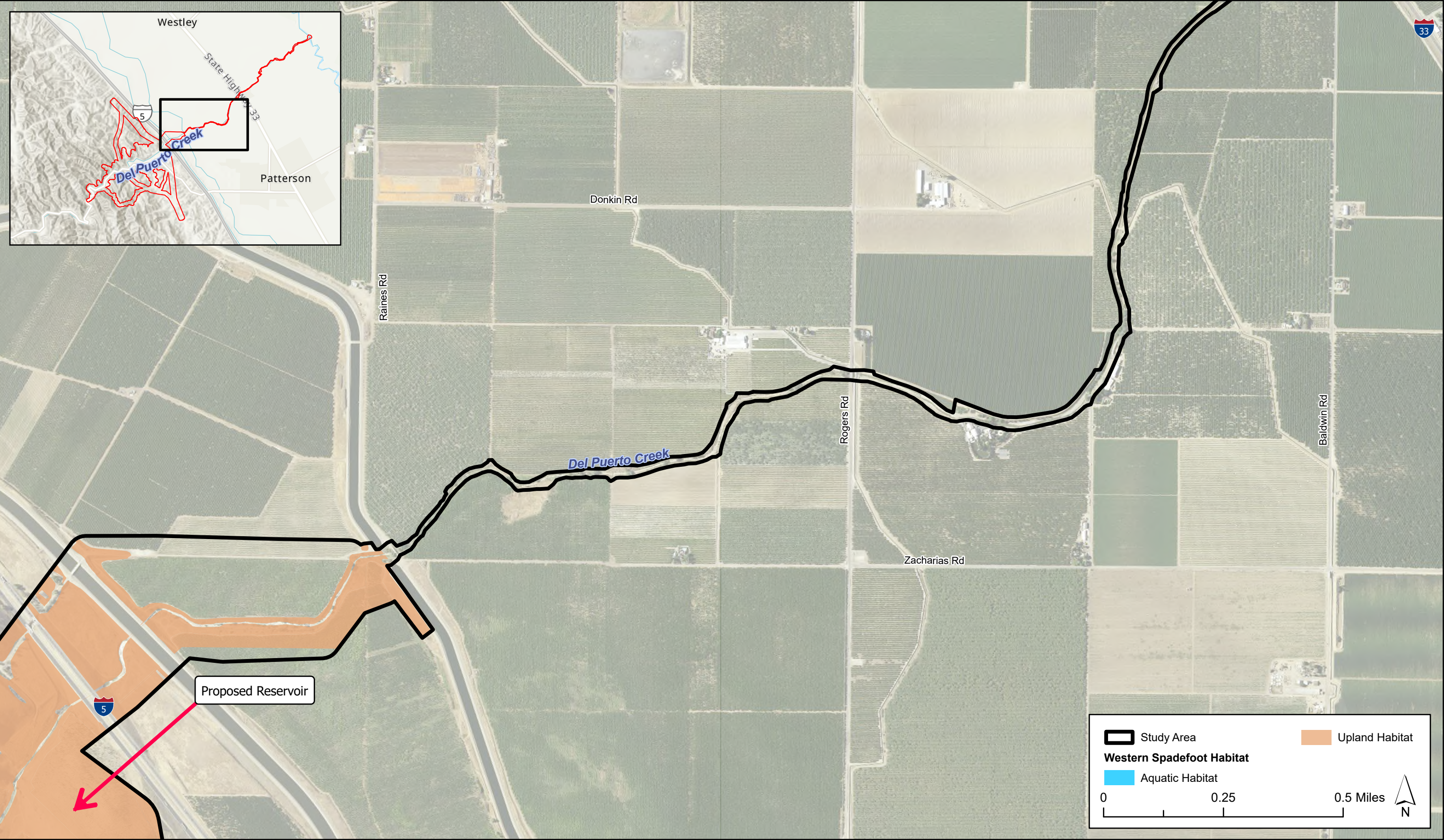


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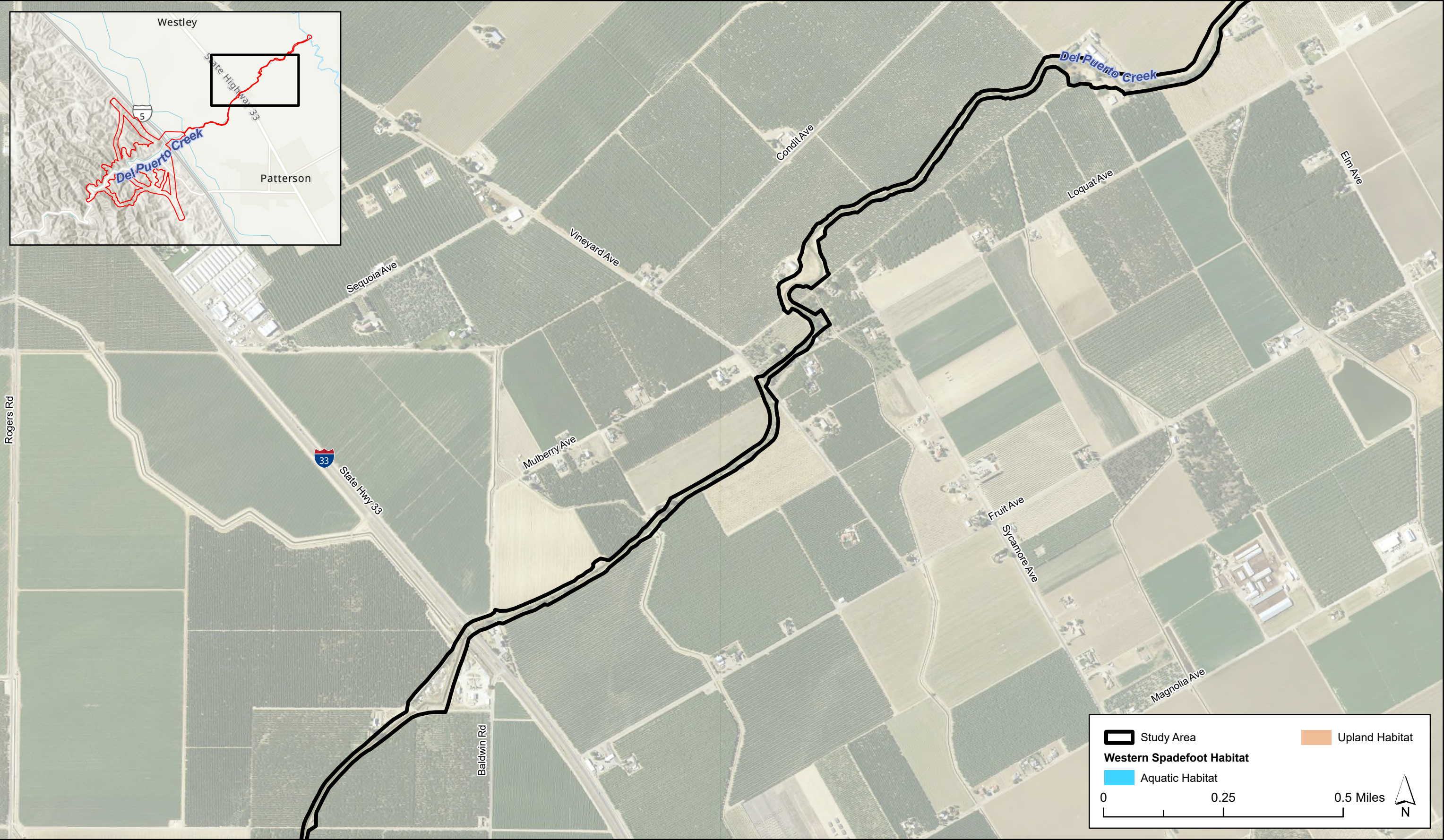


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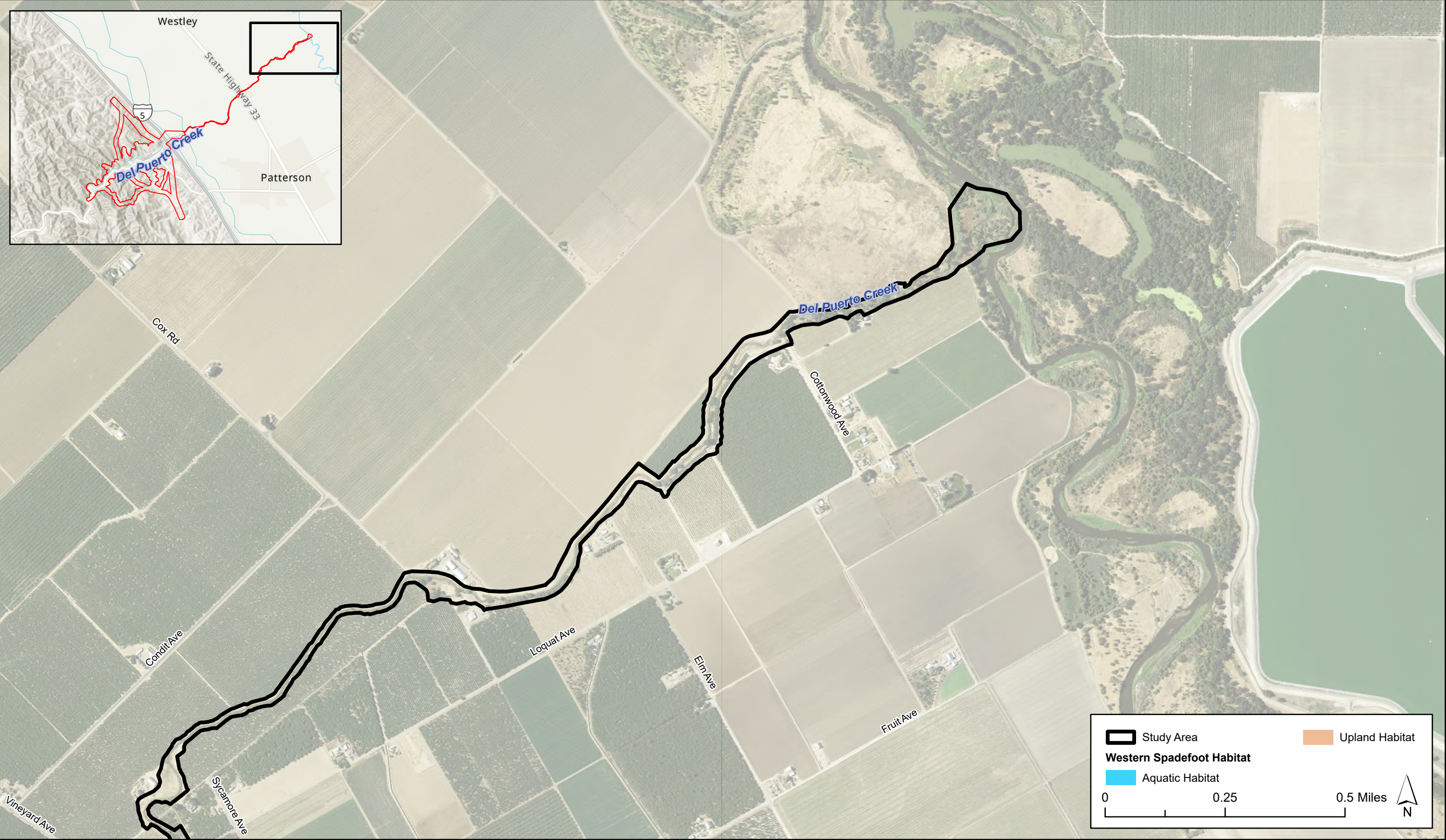


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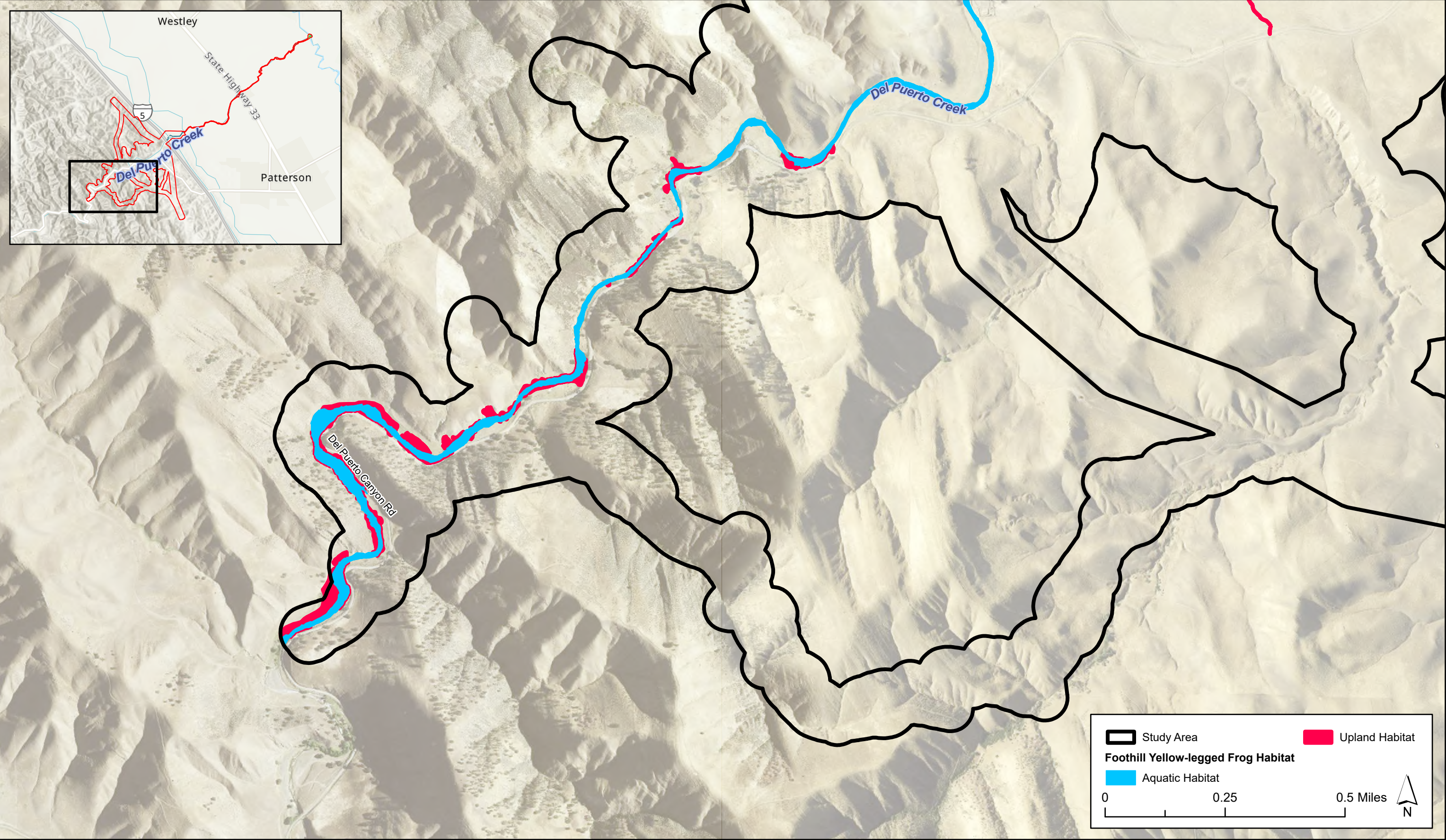


Figure 22
Modeled Foothill Yellow-legged Frog Habitat

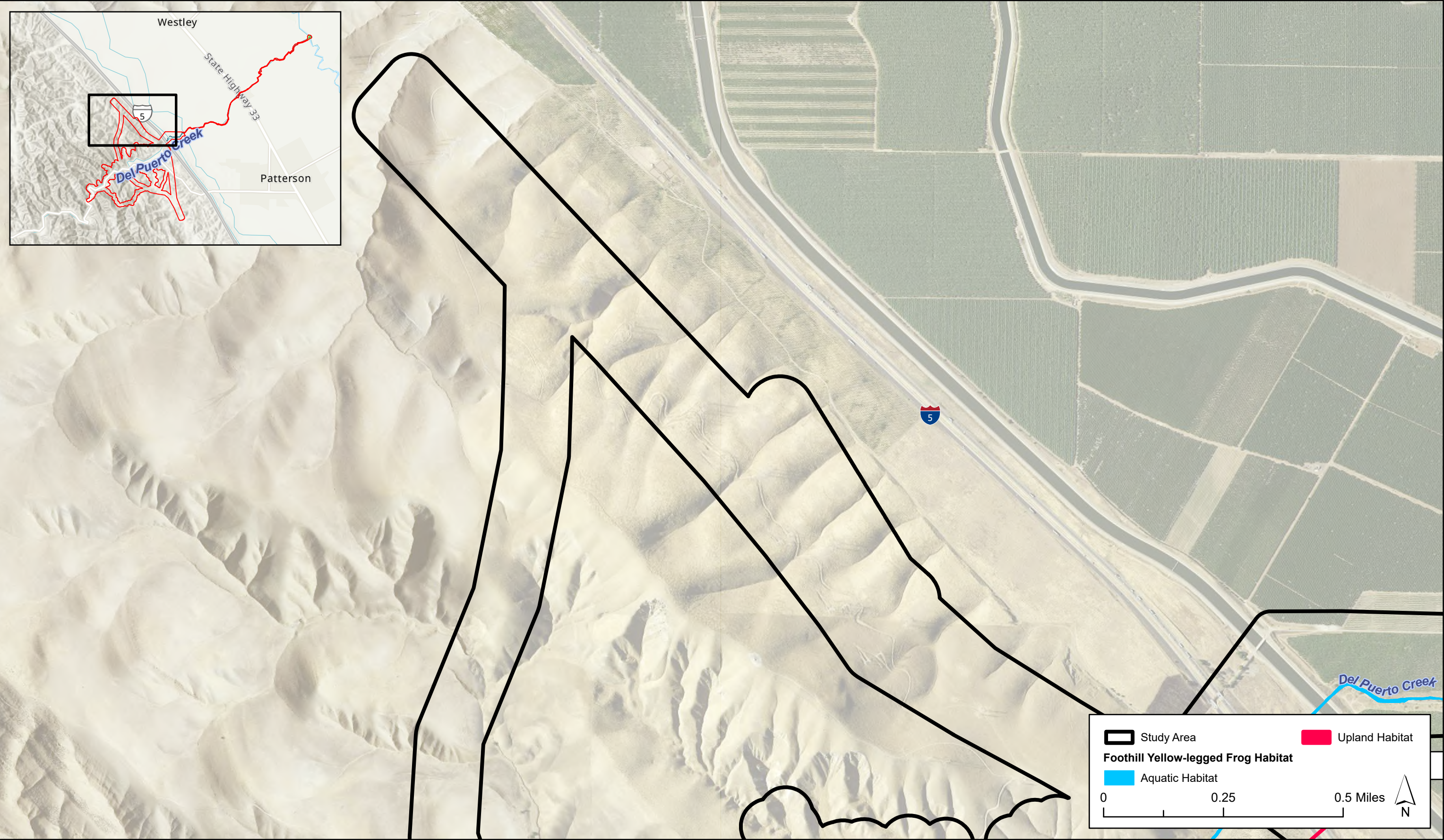


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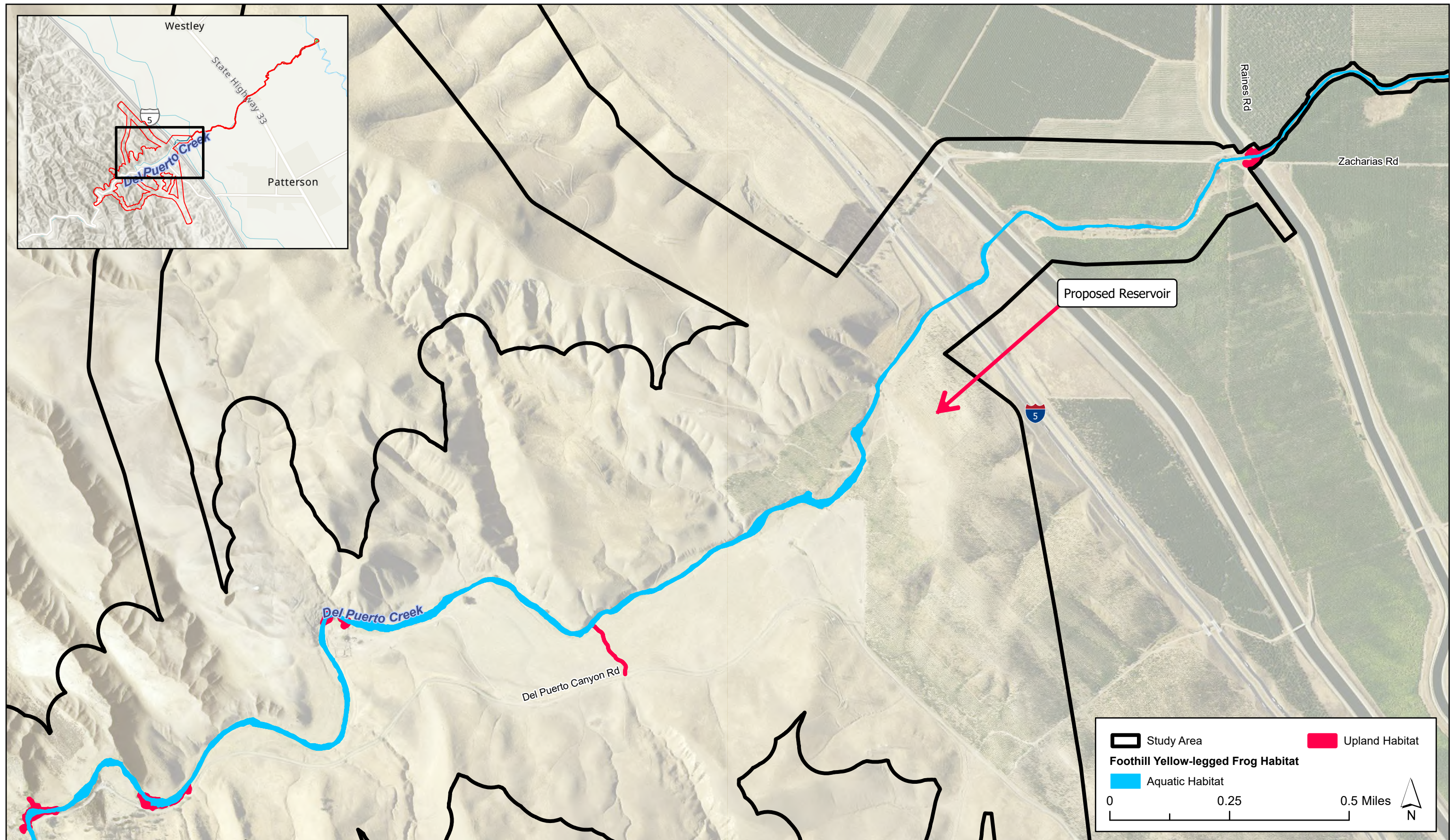


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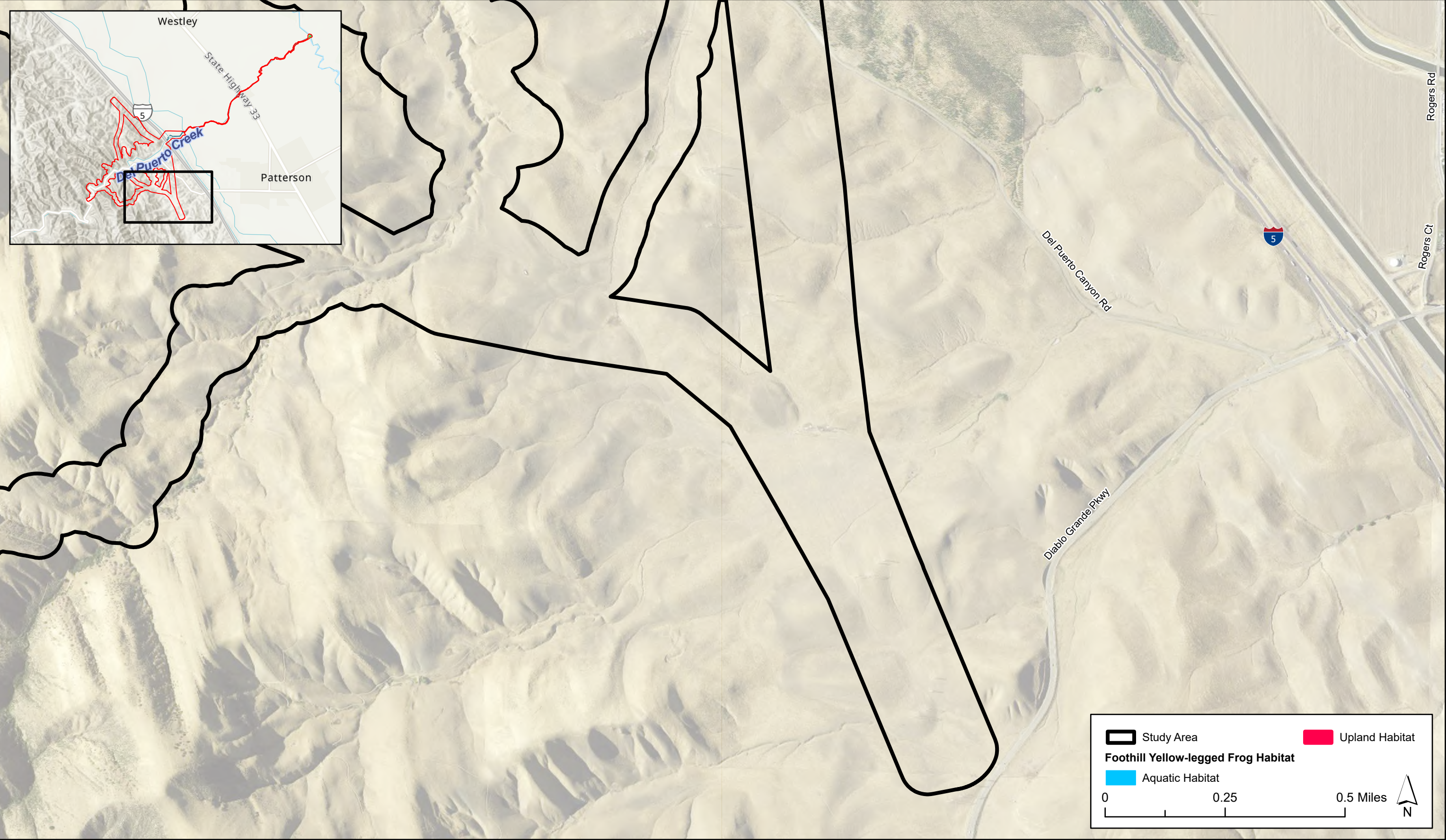


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Modeled Foothill Yellow-legged Frog Habitat

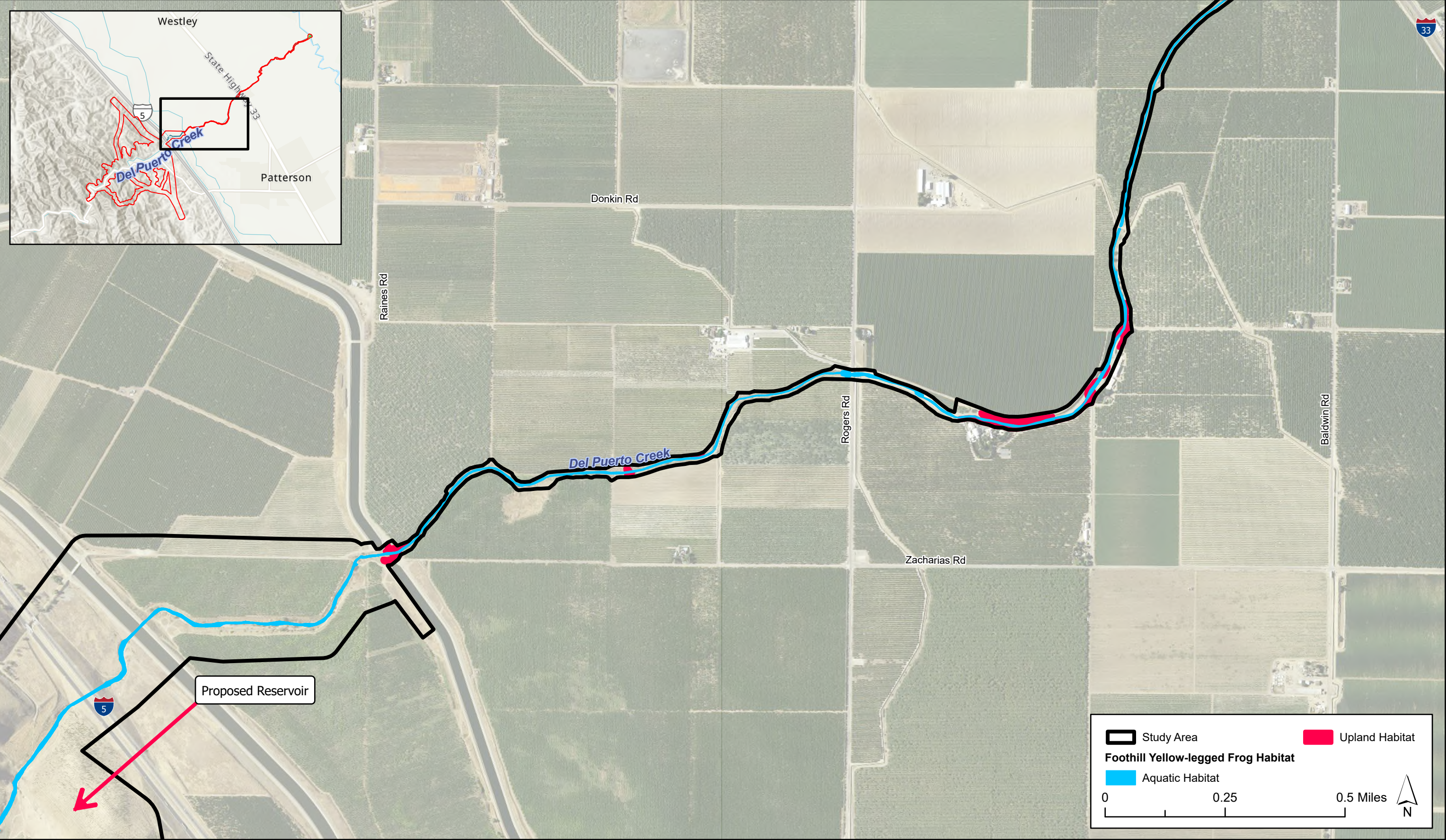


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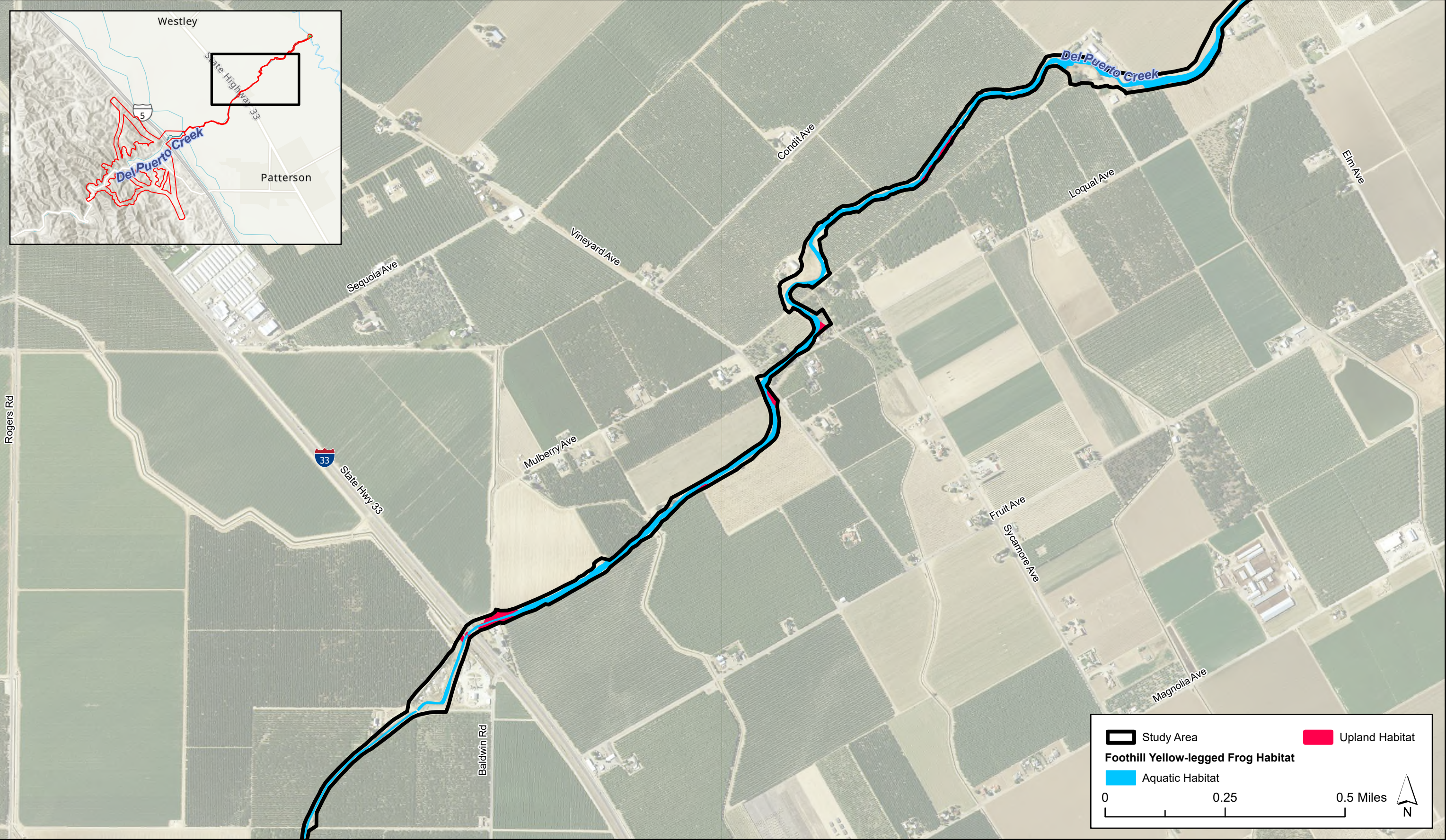


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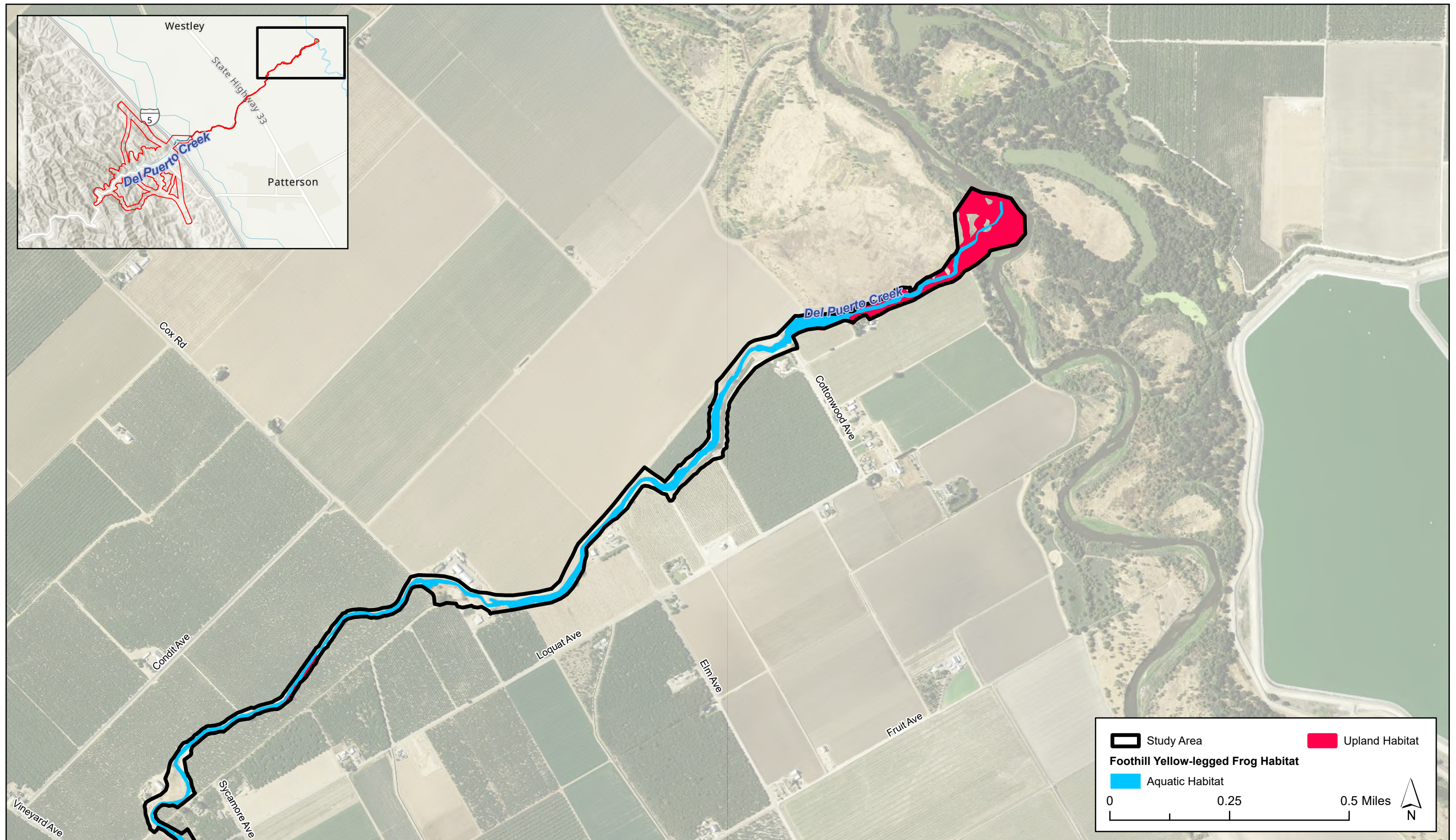


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Modeled Foothill Yellow-legged Frog Habitat

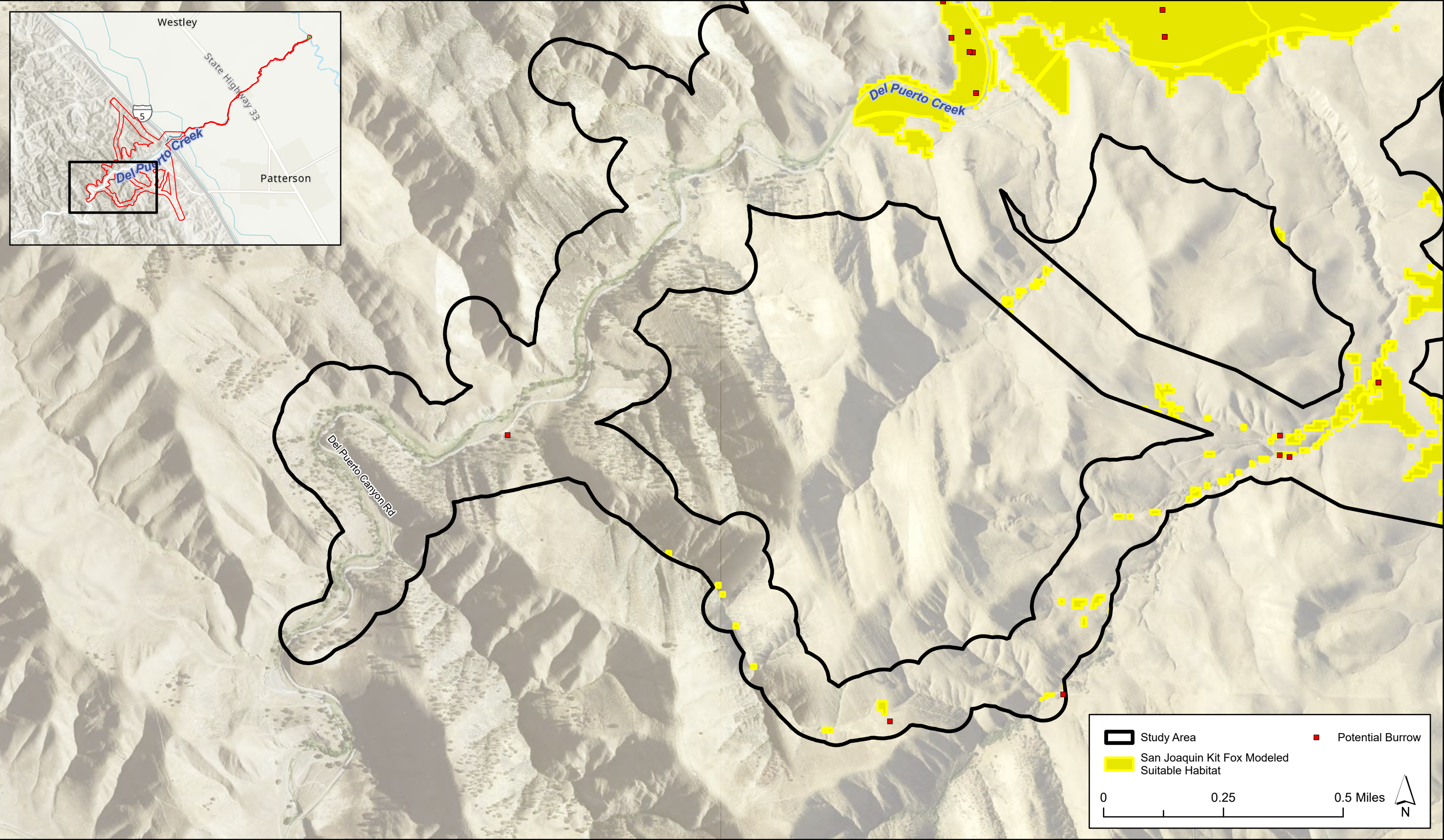


Figure 23
Modeled San Joaquin Kit Fox Habitat

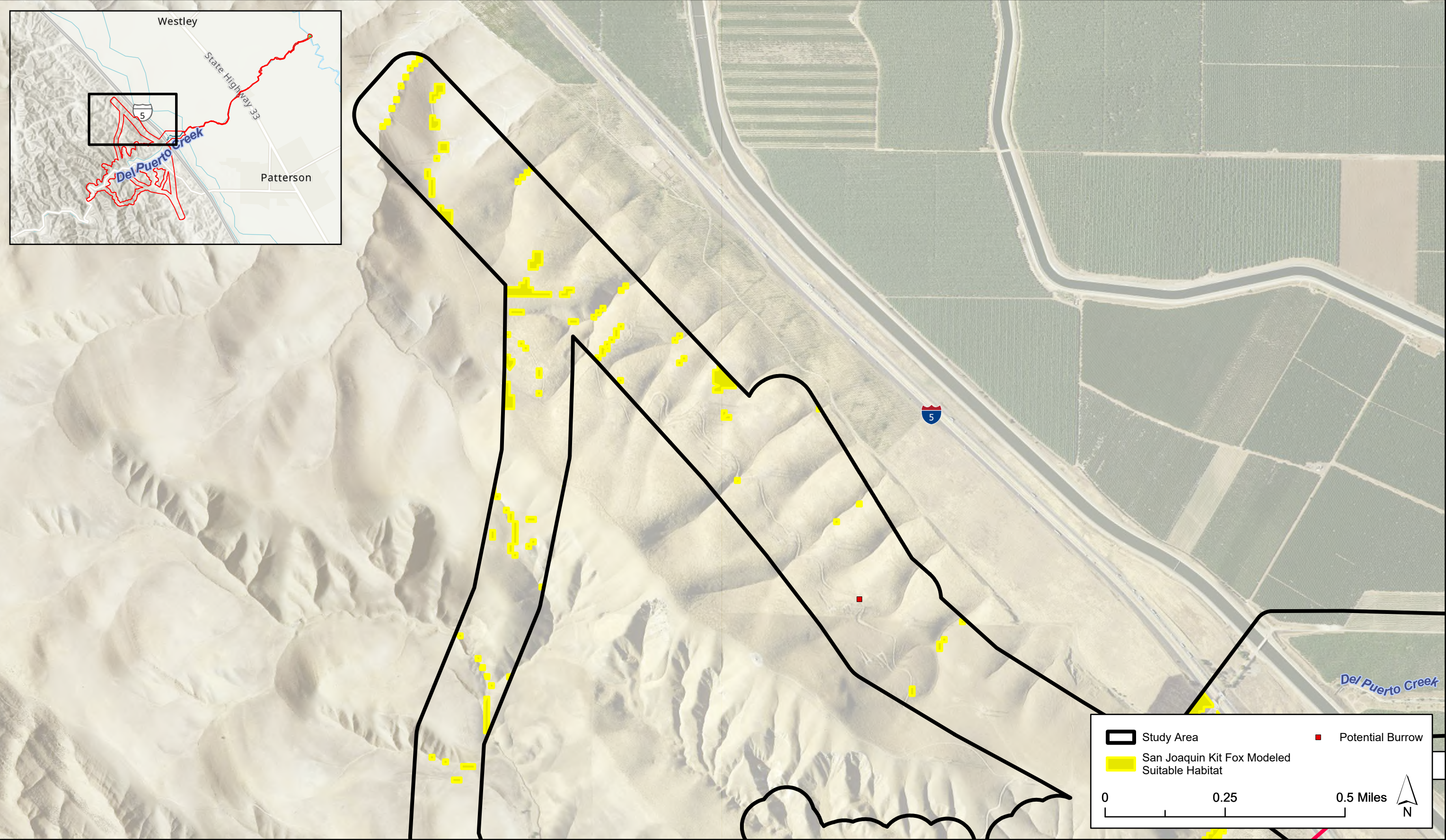


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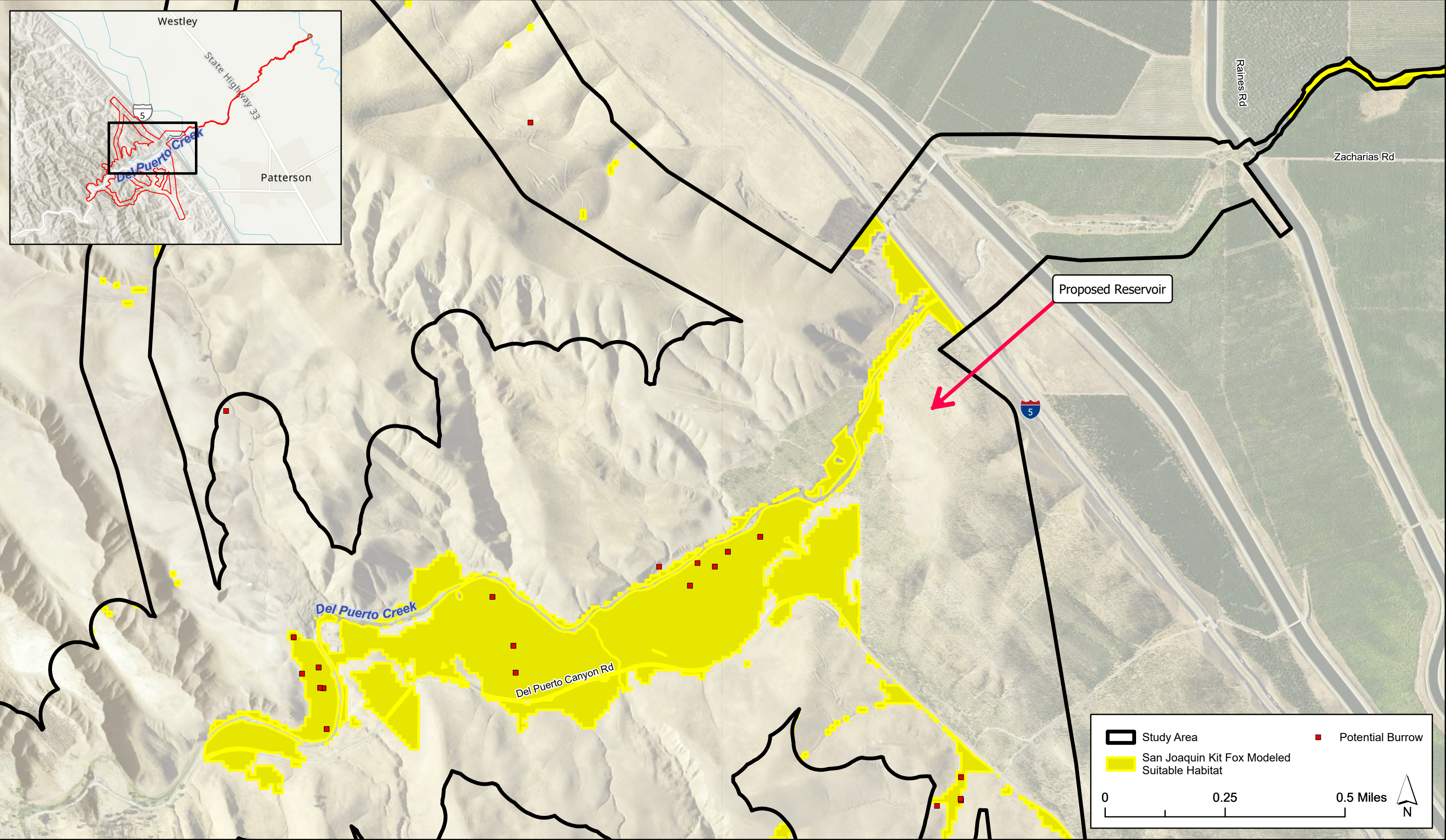


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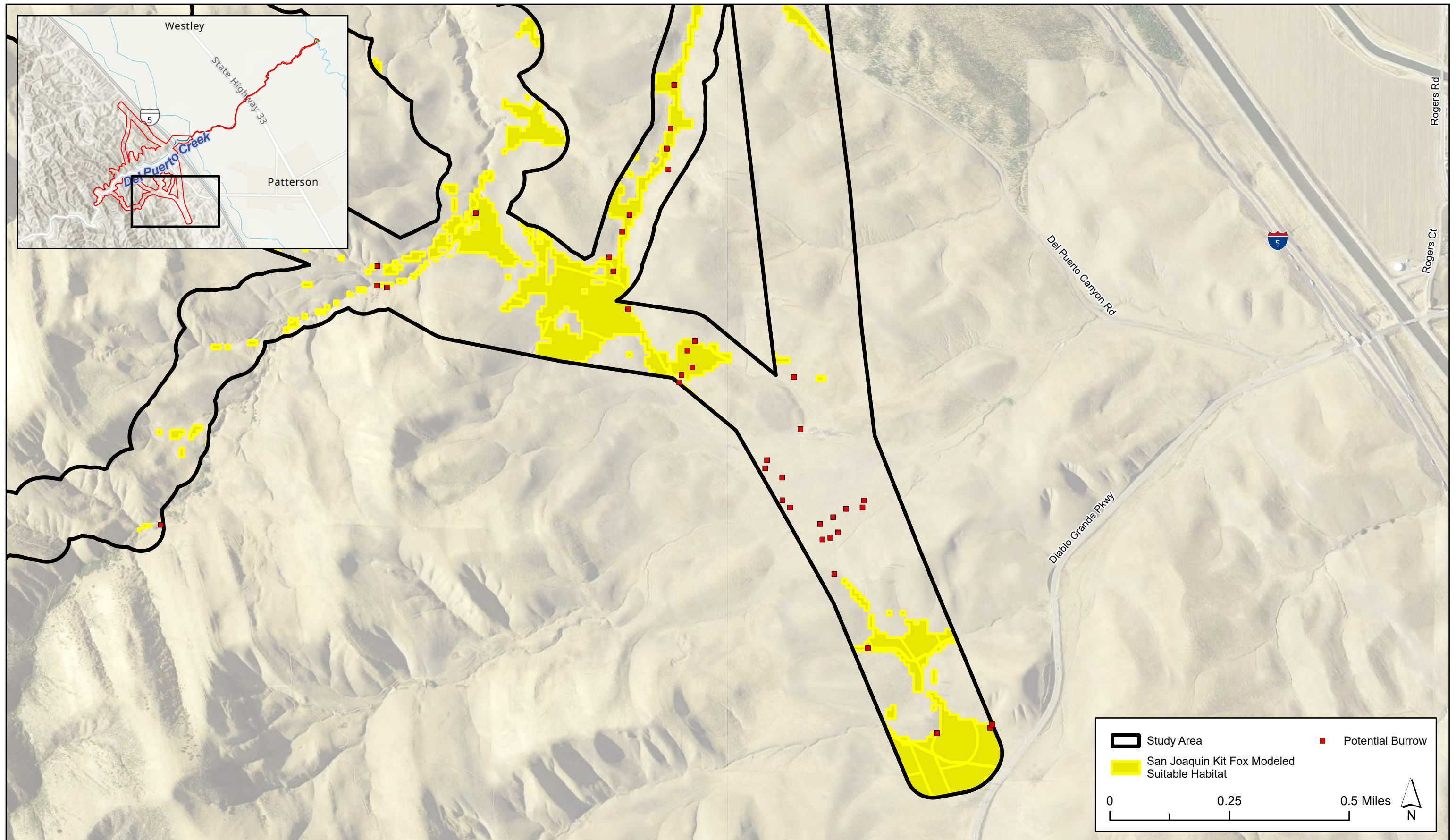


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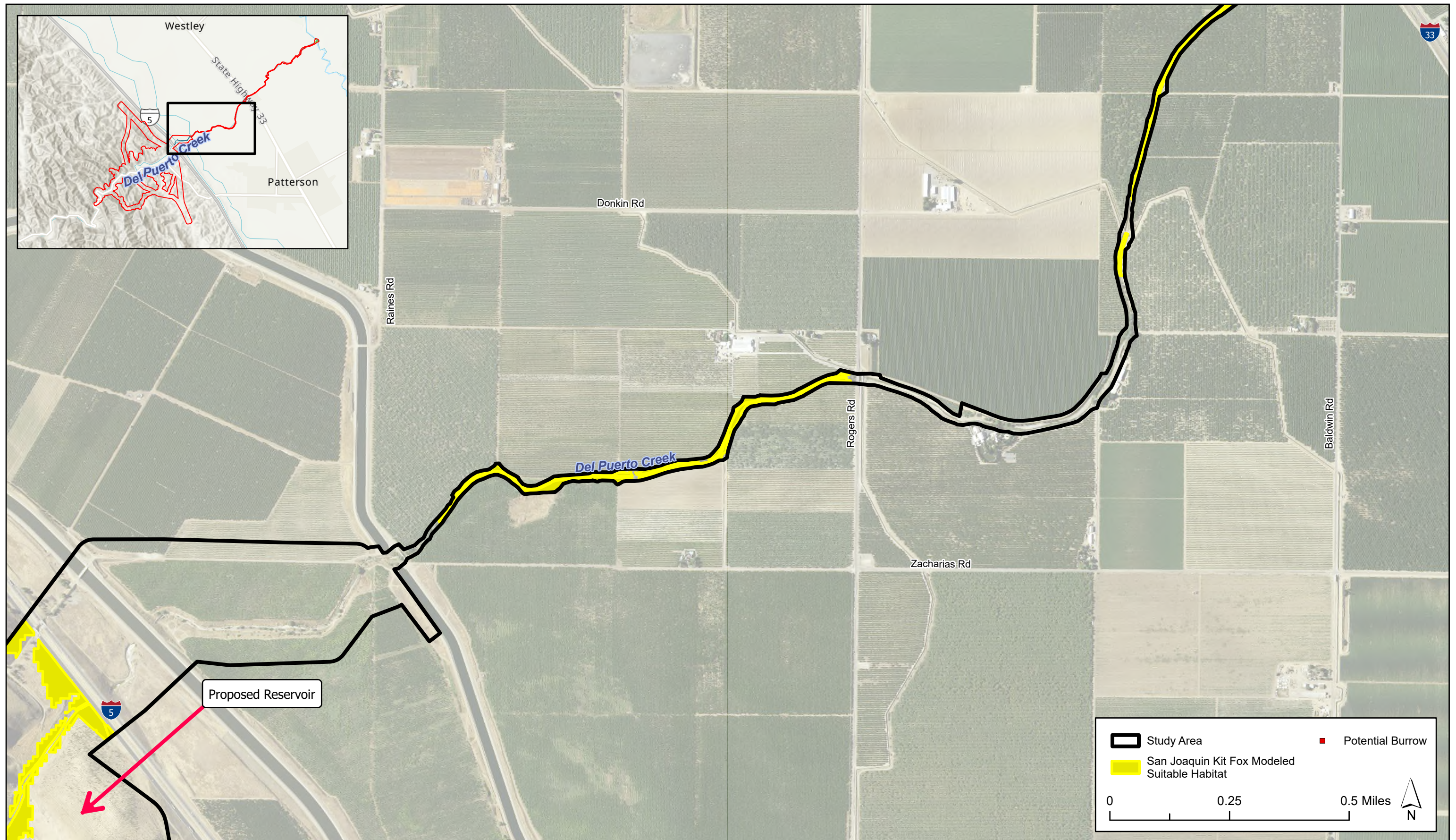


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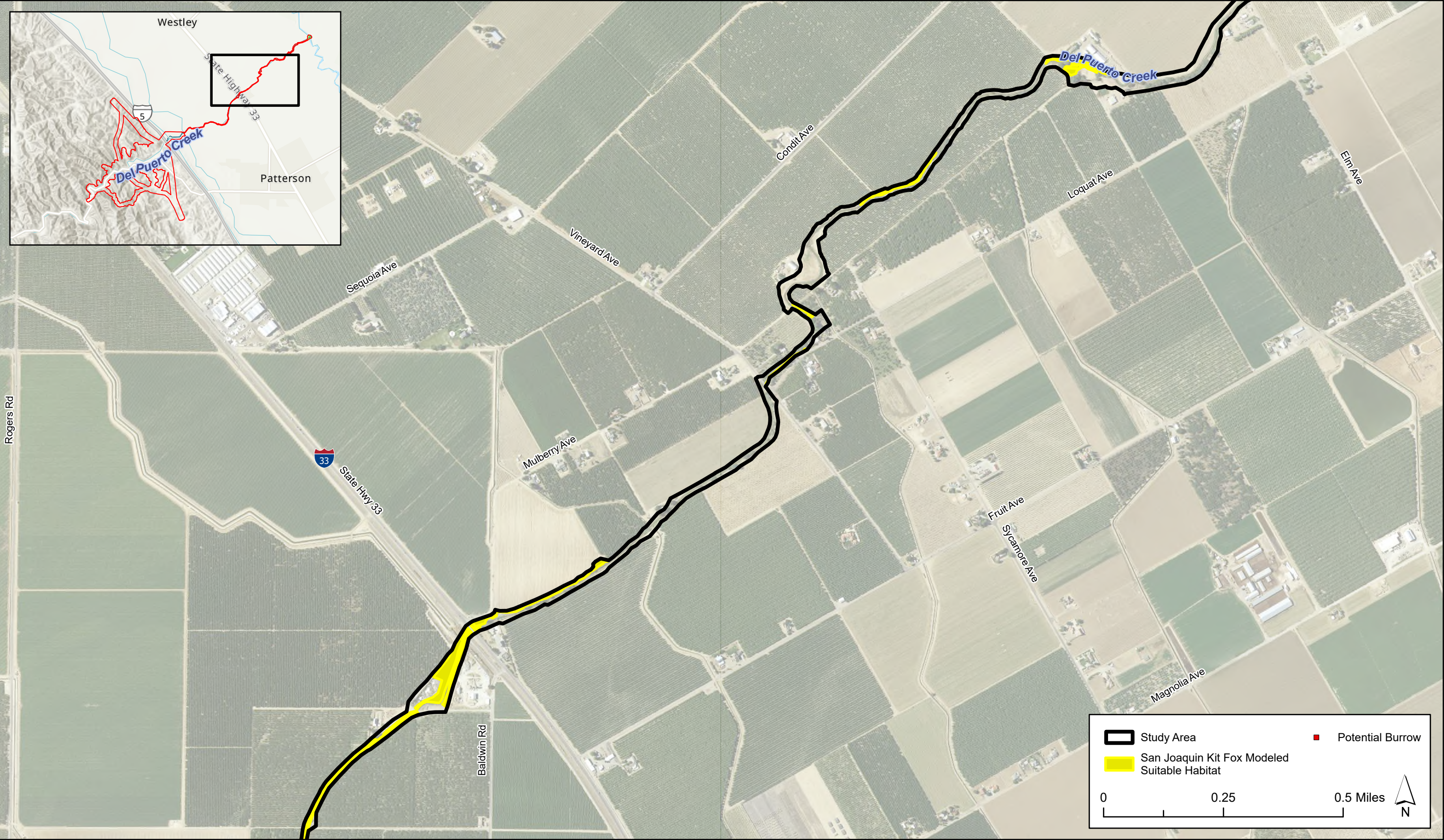


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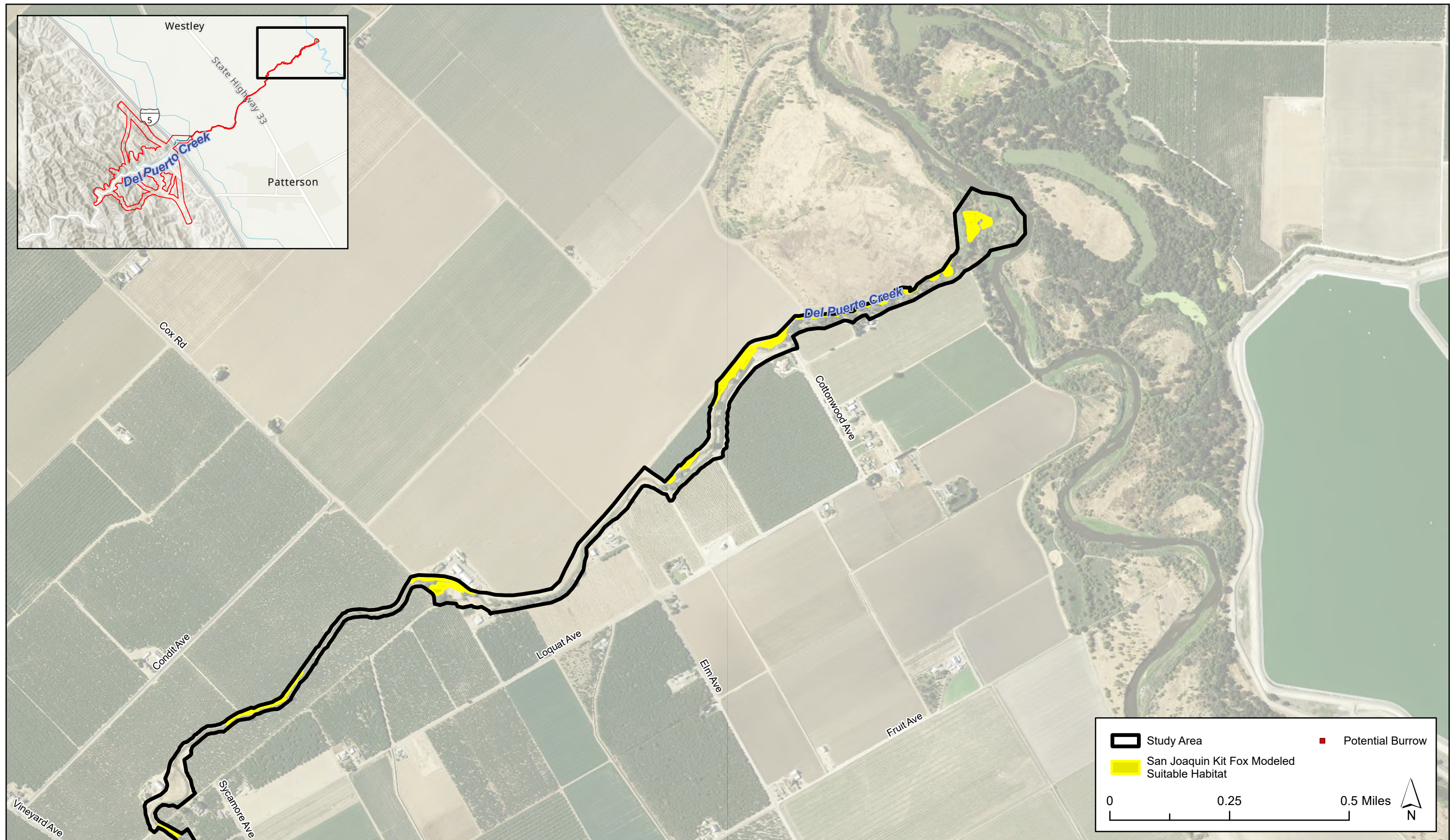


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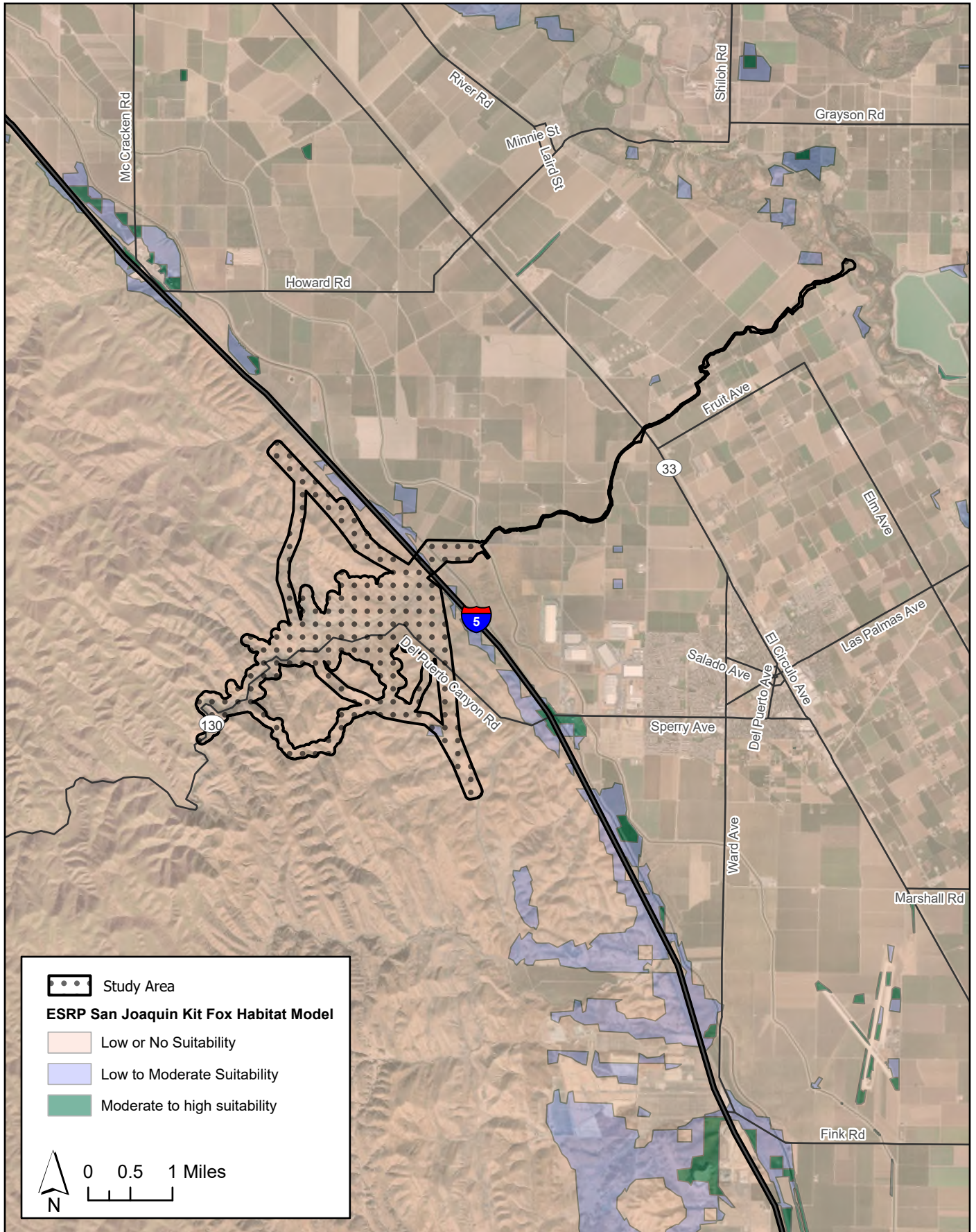


Figure 24
ESRP San Joaquin Kit Fox Habitat Suitability

Appendix D List of Preparers

Reclamation

Allison Jacobson, Project Manager
David Brick, NEPA lead
Andrew Overton, Natural Resources Specialist
Jesse Sikora, Natural Resources Specialist
Scott Springer

Del Puerto Water District

Anthea G. Hansen, General Manager

San Joaquin River Exchange Contractors Water Authority

Chris White, Executive Director

Consultants

Woodard & Curran

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Robin Cort, Environmental Task Lead
Haley Johnson, Air Quality and GHG Analysis
Arthella Vallarta, Planner
Andrea Russo, Air Quality modeling
Sally Johnson, Planner
Megan Gatto, Planner
Sarah Miller, GIS Analyst

ICF

Lauren Lockwood, ICF Project Manager
Sara Baker, ICF Deputy Project Manager
Megan Jameson, Senior Permitting Specialist
Shelby Caulder, Cultural Resources Specialist
Steve Pappas, Cultural Resources Specialist
Allison Lyons Medina, Senior Architectural Historian
Danika Tsao, Senior Biologist
Kaitlin Kozlowski, Senior Wildlife Biologist
Lisa Weber, Senior Botanist

Appendix D – List of Preparers

Jeff Kozlowski, Principal Biologist
Eric Stitt, Wildlife Biologist

Appendix E: Regulatory Setting

This section describes laws and regulations that may apply to the proposed project.

Aesthetics

Federal Policies and Regulations

No federal policies and regulations relevant to aesthetic resources apply to the proposed project.

State Policies and Regulations

California Scenic Highway Program

In 1963, the state legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (Caltrans 2014). The State Highway System includes designated scenic highways and those that are eligible for designation as scenic highways. Section 261 of the Streets and Highways Code requires:

The standards for official scenic highways shall also require that local governmental agencies have taken such action as may be necessary to protect the scenic appearance of the scenic corridor, the band of land generally adjacent to the highway right-of-way, including, but not limited to, (1) regulation of land use and intensity (density) of development; (2) detailed land and site planning; (3) control of outdoor advertising; (4) careful attention to and control of earthmoving and landscaping; and (5) the design and appearance of structures and equipment.

Portions of Interstate 5 are officially designated as a state scenic highway, including from State Route 152 in Merced County, south of the project area, to State Route 205 in San Joaquin County, north of the project area. The entire length of Interstate 5 that lies within Stanislaus County is therefore a state scenic highway.

Local Policies and Regulations

Stanislaus County

General Plan

The Conservation Element of the General Plan (2016a) includes the following goals and policies relevant to aesthetic resources within the project area:

GOAL ONE: Encourage the protection and preservation of natural and scenic areas throughout the County.

Policy One: Maintain the natural environment in areas dedicated as parks and open spaces.

Policy Two: Assure compatibility between natural areas and development.

The Land Use Element of the Stanislaus County General Plan (2016b) includes the following goals and policies relevant to aesthetic resources within the project area:

GOAL TWO: Encourage compatibility between land uses.

Policy Sixteen: Outdoor lighting shall be designed to be compatible with other uses.

Implementation Measure 2: Outdoor lighting shall be required to provide minimum impacts to the surrounding environment and where feasible will utilize downcast cut-off type fixtures that are shielded and direct the light only towards objects requiring illumination.

None of the Community Plans within the Land Use Element of the Stanislaus County General Plan address communities within 3 miles of the project area and are therefore not relevant to the aesthetic impacts of the proposed project.

Zoning Ordinance (2017)

The project area is zoned General Agricultural (A-2). Though no zoning codes for A-2 are directly relevant to aesthetic resources and the proposed project, **Section 21.20.010** of the County's zoning code states that

It is the intent of these district regulations to support and enhance agriculture as the predominant land use in the unincorporated areas of the county. These district regulations are also intended to protect open-space lands pursuant to Government Code Section 65910. The procedures contained in this chapter are specifically established to ensure that all land uses are compatible with agriculture and open space, including natural resources management, outdoor recreation and enjoyment of scenic beauty.

For all Communication Facilities, the following sections of the County's zoning ordinance applies to the proposed project as related to aesthetic resources.

21.91.030 Siting Standards

B. Siting standards for communication towers

1. The tower shall be a monopole design unless the Planning Director determines that it would not be visible to the general public, in which case a lattice tower design may be approved.
2. The height of the tower shall not exceed 130 feet above ground level.

21.91.050 Aesthetic Considerations

Decisions on use permits or staff approval permits may take into consideration the aesthetic impact of the proposed microwave dish antennas and/or communications facilities and may include conditions of approval for the purpose of reducing the visual impact of the antenna and/or facility as seen from adjacent properties or for the purpose of reducing the potential of safety or health hazards. Such conditions may include, but are not limited to partitions, screening, landscaping, mountings, fencing, height of antenna, and site location within the parcel.

City of Patterson

General Plan

The City of Patterson's General Plan Land Use Element (2014b) identifies the Foothills Expansion Area as a potential area for future development. This area includes the project area for the northern saddle dam, a portion of the conveyance corridor, and the potential utility realignment corridor. Development in the Foothills Expansion Area should consider potential visual impacts as viewed from Interstate 5 and the City of Patterson, and hillside development should address grading, slope stability and visual impacts.

The City of Patterson's Community Design Element (2014c) includes the following goal and policy relevant to the proposed project and aesthetic resources:

Goal CD-5: To maintain and enhance the visual quality of the foothills.

Policy CD-5.1 Hillside development. Development on the hillsides shall:

- a. Keep a low profile and conform to the natural slopes;
- b. Avoid large, continuous walls or roof surfaces, or prominent foundation walls, poles, or columns;
- c. Minimize grading of roads;
- d. Minimize the grading of visible driveways;
- e. Include planting which is compatible with native hillside vegetation and which provides a visual transition from developed to open areas;
- f. Use materials, colors, and textures which blend with the natural landscape and avoid high contrasts;
- g. Minimize exterior lighting.

The City of Patterson's Natural Resources Element (2014d) includes the following goal and policy relevant to aesthetic resources in the project area:

Goal NR-3: To protect natural open space areas, sensitive native vegetation, and wildlife communities and habitat.

Policy NR-3.3 On-site resource preservation. The City shall encourage new development to preserve on-site natural elements that contribute to the community's native plant and wildlife species value and to its aesthetic character.

Zoning Ordinance (2017)

The City of Patterson's zoning ordinance includes requirements for development in designated zones. Within the City's boundaries, the project area is zoned West Patterson Light Industrial. The following sections of the City's zoning ordinance are relevant to the proposed project and aesthetic resources:

18.42.040 Development standards

Building height in West Patterson Light Industrial zoned parcels is 45 feet.

18.46.050 Performance standards

B. Glare and Heat. No direct or sky-reflected glare or heat, whether from floodlights or from high temperature processes (including combustion or welding or otherwise) shall be visible or felt at the property line.

18.80.060 General lighting requirements

B. Nuisance Prevention and Shielding. All outdoor lighting shall be designed, located, installed, directed downward or toward structures, fully shielded, and maintained in order to prevent glare, light trespass, and light pollution. All outdoor lighting shall be recessed and/or constructed with full downward shielding in order to reduce light and glare impacts on trespass to adjoining properties and public rights-of-way. Each fixture shall be directed downward and away from adjoining properties and public rights-of-way, so that no light fixture directly illuminates an area outside of the project site intended to be illuminated.

C. Height. The maximum height of light poles on private property shall be:

1. Thirty-two feet for all nonresidential districts;
2. Twenty-four feet for all residential districts and within one hundred feet of a residential zoning district;
3. Exceptions to the height limits shall be considered by the planning commission for athletic fields and other unique circumstances where additional height is required.

D. Level of Illumination. Outdoor lighting shall be designed to illuminate at the minimum level necessary for safety and security and to avoid the harsh contrasts in lighting levels between the project site and adjacent properties. Illumination requirements are provided in Table 18.78.060-1 (Illumination Requirements).

E. Hours. Automatically control exterior lighting dusk to dawn to turn off or lower light levels during inactive periods.

Agriculture***Federal Policies and Regulations***

Farmland Protection Policy Act. The Farmland Protection Policy Act requires federal agencies to (a) evaluate the adverse effects of their programs on the preservation of farmland; (b) consider

alternative actions that could lessen adverse effects, and (c) ensure that their programs are compatible with state and local programs and policies for the protection of farmland. Farmland is defined as prime or unique farmlands as determined by the appropriate state or local agency. Federal agencies are required to develop and review their policies and procedures to implement the act every two years (USDA 2014).

State Policies and Regulations

Farmland Mapping and Monitoring Program. The Farmland Mapping and Monitoring Program, administered by the California Department of Conservation, produces maps and statistical data for use in analyzing impacts on California's agricultural resources (CDOC 2019a). The program rates agricultural land according to soil quality and irrigation status and publishes important farmland maps. Important farmland maps are updated every two years using a computer mapping system, aerial imagery, public review, and field reconnaissance (CDOC 2019a). Important farmland categories are as follows (CDOC 2019b):

- **Prime Farmland:** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime farmland must have been used for irrigated agricultural production at some time during the four years before the mapping date.
- **Farmland of Statewide Importance:** Farmland similar to prime farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of statewide importance must have been used for irrigated agricultural production at some time during the 4 years before the mapping date.
- **Unique Farmland:** Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands usually are irrigated but may include non-irrigated orchards or vineyards as found in some climatic zones. Unique farmland must have been cropped at some time during the 4 years before the mapping date.
- **Farmland of Local Importance:** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

California Land Conservation Act of 1965 (Williamson Act). The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDOC 2019c). In exchange for restricting their property to agricultural or related open space use, landowners receive property tax assessments that are substantially lower than the market rate (tax assessments are based upon farming and open space uses as opposed to full market value).

A Williamson Act contract may be terminated either through nonrenewal (preferred method) or cancellation (CDOC 2019d). To terminate a Williamson Act contract, a landowner may file a notice of nonrenewal. Beginning on the next contract anniversary date, the contract winds down over the remaining (usually nine-year) term with the landowner's property taxes gradually increasing until they reach the full unrestricted rate at the end of the nonrenewal period (CDOC 2019d).

Local Policies and Regulations

Most project facilities would be located within the jurisdiction of Stanislaus County. Portions of the conveyance facility alignment for the preferred alternative would be located within the City of Patterson city limits. Policies for Stanislaus County and the City of Patterson are presented below.

Stanislaus County General Plan. The Stanislaus County General Plan (Stanislaus County 2016) regulates land use and development in unincorporated areas of Stanislaus County and outlines goals and policies to guide zoning and land use decisions.

The following policies in the Land Use Element of the Stanislaus County General Plan are relevant to the proposed project:

Goal One. Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic, and social concerns of the residents of Stanislaus County.

Policy Two. Land designated Agriculture shall be restricted to uses that are compatible with agricultural practices, including natural resources management, open space, outdoor recreation and enjoyment of scenic beauty.

Policy Seven. Riparian habitat along the rivers and natural waterways of Stanislaus County shall, to the extent possible, be protected.

Implementation Measure One. All requests for development which require discretionary approval and include lands adjacent to or within riparian habitat shall include measures for protecting that habitat to the extent that such protection does not pose threats to proposed site uses, such as airports.

Goal Two. Ensure compatibility between land uses.

Policy Fourteen. Uses shall not be permitted to intrude into or be located adjacent to an agricultural area if they are detrimental to continued agricultural usage of the surrounding area.

Goal Three. Foster stable economic growth through appropriate land use policies.

Policy Seventeen. Agriculture, as the primary industry of the County, shall be promoted and protected.

Policy Eighteen. Promote diversification and growth of the local economy

Implementation Measure Seven. Strengthen the agricultural sector of the economy by continuing to implement the strategies for agriculture-related economic development identified under Goal One of the Agricultural Element.

The Stanislaus County General Plan Agricultural Element contains the following goals, objectives and policies related to agricultural resources and the proposed project:

Goal One. Strengthen the agricultural sector of our economy.

Objective 1.2. Support the development of agriculture-related uses.

Policy 1.7. Concentrations of commercial and industrial uses, even if related to surrounding agricultural activities, are detrimental to the primary use of the land for agriculture and shall not be allowed.

Objective 1.3. Minimizing agricultural conflicts.

Policy 1.10. The County shall protect agricultural operations from conflicts with non-agricultural uses by requiring buffers between proposed non-agricultural uses and adjacent agricultural operations.

Goal Two. Conserve our agricultural lands for agricultural uses.

Objective 2.1. Continued participation in the Williamson Act.

Policy 2.1. The County shall continue to provide property tax relief to agricultural landowners by participating in the Williamson Act.

Policy 2.3. The County shall ensure all lands enrolled in the Williamson Act are devoted to agricultural and compatible uses supportive of the long-term conservation of agricultural land.

Objective 2.2. Discourage urbanization and the conversion of agricultural land in unincorporated areas of the County.

Policy 2.5. To the greatest extent possible, development shall be directed away from the County's most productive agricultural areas.

Policy 2.6. Agricultural lands restricted to agricultural use shall not be assessed to pay for infrastructure needed to accommodate urban development.

Objective 2.4. Assessing and mitigating impacts of farmland conversion.

Policy 2.14. When the County determines that the proposed conversion of agricultural land to non-agricultural uses could have a significant effect on the environment, the County shall fully evaluate on a project-specific basis the direct and indirect effects, as well as the cumulative effects of the conversion.

Goal Three. Protect the natural resources that sustain our agricultural industry.

Objective 3.2. Water resources

Policy 3.4. The County shall encourage the conservation of water for both agricultural and urban uses.

Policy 3.5. The County will continue to protect the quality of water necessary for crop production and marketing.

Policy 3.6. The County will continue to protect local groundwater for agricultural, rural domestic, and urban use in Stanislaus County.

Objective 3.3. Soil resources

Policy 3.7. The County shall encourage the conservation of soil resources.

The following policies in the Conservation/Open Space Element of the Stanislaus County General Plan would apply to the proposed project:

Goal Four. Provide for the open-space recreational needs of the residents of the County.

Policy Ten Discourage the division of land which forces the premature cessation of agricultural uses.

Policy Thirteen. Promote the use of water reservoirs for multiple recreational purposes, where appropriate.

Implementation Measure One. The County shall encourage the multiple uses of reservoirs as Stanislaus County Zoning Code.

Stanislaus County Zoning Code. The Stanislaus County Zoning Code is designed to promote and protect the public health, safety, peace, morals, comfort, convenience, and general welfare of those living and working within Stanislaus County. The zoning code provides a general plan of development for the county, and serves to guide, control and regulate the future growth of the county in accordance with the general plan. The project area is zoned as *General Agriculture District (A-2)*; that is, the project area is designed to support and enhance agriculture as the predominant land use. Uses and policies regarding the General Agriculture District are intended to protect open space lands and ensure that all land uses are compatible with agriculture and open space, including natural resources management (Stanislaus County 2017).

The zoning code also includes specific guidance regarding Williamson Act contract lands.

As described in the county's zoning code, the intent of the general agriculture district is to "support and enhance agriculture as the predominant land use in the unincorporated areas of the county" (Stanislaus County 2017). The zoning code also includes specific guidance regarding Williamson Act contract lands. Per section 21.20.045 of the Stanislaus County code, uses that may be approved on Williamson Act contract lands shall be consistent with all of the following principles of compatibility:

- The use will not significantly compromise the long-term productive agricultural capability of the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district.
- The use will not significantly displace or impair current or reasonably foreseeable agricultural operations on the subject contracted parcel or parcels or on other contracted lands in the A-2 zoning district. Uses that significantly displace agricultural operations on the subject contracted parcel or parcels may be deemed compatible if they relate directly to the production of commercial agricultural products on the subject contracted parcel or parcels or neighboring lands, including activities such as harvesting, processing, or shipping.
- The use will not result in the significant removal of adjacent contracted land from agricultural or open-space use. (Stanislaus County 2017)

Additionally, section 21.20.045 of the zoning code states that “the erection, construction, alteration, or maintenance of gas, electric, water, communication facilities” are uses compatible with the Williamson Act and may be approved on contracted land.

City of Patterson General Plan and Zoning Code. The City of Patterson General Plan (2010) is a comprehensive, long-term plan which guides development and land use within the city and within certain areas adjacent to the city (the *general plan area*). Within the general plan area, the city has designated “expansion areas” for additional development. The project area would include two of these expansion areas: the Canals Expansion Area (designated for commercial and light industrial development) and Foothills Expansion Area (designated for mixed-use hillside and highway service commercial development). The city’s General Plan includes a brief, general overview of the issues to be addressed in the development of these areas in the future (e.g., visual and circulation impacts), but does not include detailed plans for these areas.

The City of Patterson zoning code establishes zoning districts that determine allowable land uses for areas within the city boundaries. The portion of the city that is within the project area is designated for light industrial use; no areas within the city are designated for agricultural use (City of Patterson 2014a). The area of overlap between the city and the project area is currently planted with abandoned orchards but is planned to be developed as a business park that will house light industrial, and general commercial uses and associated infrastructure (City of Patterson 2014b). See *Section 3.12, Land Use and Recreation*, **Figure 3.12-2** for a map displaying the City of Patterson zoning.

The City of Patterson General Plan Map also designates land uses for areas adjacent to the city, both within the city’s sphere of influence and within its general plan area, which extends outside the sphere of influence. In the areas where the general plan area overlaps with the project area, the city has identified light industrial, highway service commercial, and mixed-use areas (City of Patterson 2014a). The city does not identify agricultural land uses within the project area.

The following policies in the land use element of the City of Patterson General Plan are relevant to the proposed project:

Goal LU-3. To designate adequate land and provide support for the development of commercial uses providing goods and services to Patterson residents and to become the commercial service hub for western Stanislaus County.

Goal LU-5. To designate sufficient land to accommodate land uses serving the traveling public.

Policy LU-5.1. Highway Commercial development. The City shall support the development of highway-serving commercial area near the Sperry Avenue/Interstate 5 interchange and near a future interchange in the vicinity of Zacharias Road.

Goal LU-7. To designate adequate land and provide support for light and heavy industrial uses that create jobs and enhance the economy of Patterson.

The City of Patterson Zoning Code establishes zoning districts that determine allowable land uses within the city boundaries (City of Patterson 2017). The portion of the project area that is within the city is zoned as West Patterson light industrial (City of Patterson 2014). This designation is generally consistent with the city’s light industrial designation (with minor exceptions that would not apply to the proposed project) (City of Patterson 2017). The city’s general plan map also makes zoning determinations for areas that are within the general plan area. The portions of the project area that are outside the city limits but within the general plan area are zoned for mixed use, highway service

commercial, general commercial, and light industrial uses. The zoning designations that are applicable within the project area are described below:

- **General commercial:** The general commercial land use type provides for land-extensive retail and wholesale commercial uses, offices, public and quasi-public uses, and similar and compatible uses. The purpose of the general commercial district is to stabilize, improve, and protect the characteristics of commercial businesses and to provide adequate locations for stores, shops, and offices which are supplying commodities or performing services for residents of the city as a whole. Public utility structures are not permitted in general commercial areas; electrical substations are allowed with a conditional use permit.
- **Light industrial (including West Patterson light industrial):** The light industrial designation provides locations for the development of industrial parks, warehouses, light manufacturing, public and quasi-public uses, and similar and compatible uses. Public utility structures are permitted in light industrial areas; electrical substations are allowed with a conditional use permit.
- **Mixed use:** The purpose of the mixed-use overlay district is to provide special flexibility within areas zoned for commercial or office development to allow for the addition of residential development. For a General Commercial area with mixed use overlay the permitted uses are defined by the General Commercial designation.
- **Highway service commercial:** The highway service commercial land use designation is applied to locations along highways and is intended to provide businesses and services to meet the needs of the traveling public. Under this zoning designation, public utility structures are not permitted; electrical substations are allowed with a conditional use permit.

Air Quality

Federal Policies and Regulations

The EPA is responsible for establishing NAAQS, enforcing the Federal Clean Air Act, and regulating transportation-related emission sources under the exclusive authority of the federal government.

Clean Air Act

The Clean Air Act governs air quality in the United States and is administered by the EPA. The EPA is responsible for setting and enforcing the NAAQS for atmospheric pollutants, which are presented in **Table 3.3-3**. EPA calls these pollutants “criteria” air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health is called primary standards. Another set of limits intended to prevent environmental and property damage is called secondary standards.

EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The EPA also has jurisdiction over emission sources outside state waters (outer continental shelf) and establishes various emissions standards for vehicles sold in states other than California. As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. The State Implementation Plan must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a

combination of performance standards and market-based programs within the timeframe identified in the State Implementation Plan.

Table 3.3-1: State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards – Primary	National Standards – Secondary
Ozone (O ₃)	1 Hour	0.09 ppm	--	--
	8 Hour	0.070 ppm	0.070 ppm	Same as primary
Respirable Particulate Matter (PM ₁₀)	24 Hour	50 µg/m ³	150 µg/m ³	Same as primary
	Annual Average	20 µg/m ³	--	--
Fine Particulate Matter (PM _{2.5})	24 Hour	--	35 µg/m ³	Same as primary
	Annual Average	12 µg/m ³	12.0 µg/m ³	15 µg/m ³
Nitrogen Dioxide (NO ₂)	1 Hour	180 ppb	100 ppb	--
	Annual Average	30 ppb	53 ppb	Same as primary
Carbon Monoxide (CO)	1 Hour	20 ppm	35 ppm	--
	8 Hour	9.0 ppm	9 ppm	--
Sulfur Dioxide (SO ₂)	1 Hour	0.25 ppm	0.075 ppm	--
	3 Hour	--	--	0.5 ppm
	24 Hour	0.04 ppm	0.14 ppm	--
	Annual Average	--	0.030 ppm	--

Source: California Air Resources Board 2016.

Corporate Average Fuel Economy Standards

The Corporate Average Fuel Economy standards were first enacted by Congress in 1975, requiring vehicle manufacturers to comply with the gas mileage or fuel economy standards. These standards are set and regulated by the National Highway Traffic Safety Administration, with testing and data support from EPA. The issued rules include fuel economy standards for light-, medium- and heavy-duty vehicles. More fuel-efficient vehicles result in lower emissions of air pollutants.

For light-duty vehicles, National Highway Traffic Safety Administration and EPA issued a joint final rulemaking on October 15, 2012 to establish coordinated standards to improve fuel economy and reduce greenhouse gas emissions for vehicle model years 2017 and beyond (77 FR 62624). EPA established standards that are projected to require, on an average industry fleet wide basis, 54.5 miles per gallon; the National Highway Traffic Safety Administration standards are projected to require, on

an average industry fleet wide basis, a range from 40.3-41.0 miles per gallon. For medium- and heavy-duty vehicles, EPA and National Highway Traffic Safety Administration issued a final rule on December 27, 2016 on greenhouse gas emissions standards and fuel consumption standards for engines and vehicles model years 2021 through 2029 (81 FR 73478).

Off-road (Nonroad) Emission Regulations

EPA has adopted emissions standards for different types of off-road engines, equipment, and vehicles. For off-road diesel engines, EPA has adopted multiple tiers of emission standards.

EPA signed a final rule on May 11, 2004 introducing the Tier 4 emission standards, to be phased in between 2008 and 2015 (69 FR 38957–39273, June 29, 2004). EPA estimated the Tier 4 standards would result in emissions reductions of particulate matter of 95 percent, nitrogen oxides of 90 percent, and virtual elimination of sulfur oxides from off-road engines meeting the new standards. Such emission reductions would be achieved through the use of control technologies, including advanced exhaust gas after-treatment. To enable sulfur-sensitive control technologies in Tier 4 engines, such as catalytic particulate filters and nitrous oxides absorbers, EPA mandated reductions in sulfur content in off-road diesel fuels. In most cases, federal off-road regulations also apply in California, which has only limited authority to set emission standards for new off-road engines. The Clean Air Act preempts California's authority to control emissions from new farm and construction equipment under 175 horsepower (Clean Air Act Section 209[e][1][A]) and requires California to receive authorization from EPA for controls over other off-road sources (Clean Air Act Section 209[e][2][A]).

State Policies and Regulations

California Environmental Protection Agency

The California Environmental Protection Agency (Cal-EPA) is a state agency that includes CARB, the State Water Resources Control Board, nine Regional Water Quality Control Boards, the Integrated Waste Management Board, the Department of Toxic Substances Control, the Office of Environmental Health Hazard Assessment, and the Department of Pesticide Regulation. The mission of Cal-EPA is to restore, protect, and enhance the environment and to ensure public health, environmental quality, and economic vitality.

California Clean Air Act

The California Clean Air Act (CCAA) requires nonattainment areas to achieve and maintain the health-based State Ambient Air Quality Standards by the earliest practicable date. The California Clean Air Act is administered by CARB at the state level and by local air quality management districts at the regional level, whereby the air districts are required to develop plans and control programs for attaining the state standards (CAAQS). **Table 3.3-3** above shows the CAAQS.

CARB is responsible for ensuring implementation of the California Clean Air Act, meeting state requirements of the federal Clean Air Act, and establishing the CAAQS. It is also responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB also establishes passenger vehicle fuel specifications.

In-Use Off-Road Diesel Vehicle Regulation

In 2007, CARB adopted a regulation to reduce diesel particulate matter and NO_x emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. The regulation imposes limits on unnecessary vehicle idling to five minutes and requires fleets to reduce emissions by retiring, replacing, repowering, or installing exhaust retrofits to older engines. The restrictions on adding older vehicles

into fleets vary by fleet size. Heavy-duty diesel vehicle fleets may not add a vehicle with a Tier 0 or Tier 1 engine. For large and medium fleets, and in January 2023 for small fleets, a fleet may not add a vehicle with a Tier 2 engine, rather the engine must be Tier 3 or higher. By 2029, all fleets' vehicles must have Tier 2 or higher engines. This regulation would apply to vehicles used in construction of the proposed project.

Truck and Bus Regulation

On December 12, 2008, CARB approved a new regulation to substantially reduce emissions of diesel particulate matter, NO_x, and other pollutants from existing on-road diesel vehicles operating in California. The regulation requires affected trucks and buses to meet performance standards and requirements between 2011 and 2023. By January 1, 2023, nearly all trucks and buses will be required to have 2010 or newer model year engines. Affected vehicles included on-road, heavy-duty, diesel-fueled vehicles with a gross vehicle weight rating greater than 14,000 pounds. The regulation was updated in 2011, with revisions that provide more compliance flexibility and reflect the impact of the economic recession on vehicle activity and emissions. Heavy-duty trucks used in proposed project activities would have to comply with this regulation.

Commercial Vehicle Idling Regulation

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling requires that drivers of diesel-fueled commercial motor vehicles with gross vehicle weight ratings greater than 10,000 pounds, including buses and sleeper berth equipped trucks, not idle the vehicle's primary diesel engine longer than five minutes at any location. There are exceptions if a truck engine meets the optional low-NO_x idling emission standard, and the truck is located more than 100 feet from any restricted area (clean idle label required), which include: housing units, schools, hotels, motels, hospitals, senior care facilities, or childcare facilities. Trucks used for vendor delivery and material hauling for proposed project activities would be required to comply with the commercial vehicle idling regulatory requirements.

Heavy-Duty On-Board Diagnostic System Regulations

In 2016, CARB approved the latest version of the Heavy-Duty On-Board Diagnostic systems regulations to reduce emissions by establishing standards and other requirements for onboard diagnostic systems that are installed on 2010 and subsequent model-year engines. The systems, through the use of an onboard computer, monitor emission systems in-use for the actual life of the engine and must be capable of detecting malfunctions of the monitored emission systems, illuminating a malfunction indicator light to notify the vehicle operator of detected malfunctions, and storing fault codes identifying the detected malfunctions. The use and operation of On-Board Diagnostic systems reduces in-use motor vehicle and motor vehicle engine emissions through improvements of emission system durability and performance. Heavy-duty trucks used for proposed project activities would be required to comply with the On-Board Diagnostic systems regulatory requirements.

Heavy-Duty Diesel Vehicle Enforcement

The Heavy-Duty Vehicle Inspection Program requires heavy-duty trucks and buses to be inspected for excessive smoke and tampering, and engine certification label compliance. Any heavy-duty vehicle (i.e., vehicles with a gross vehicle weight rating greater than 6,000 pounds) traveling in California, including vehicles registered in other states and foreign countries, may be tested. Tests are performed by CARB inspection teams at border crossings, California Highway Patrol weigh stations, fleet facilities, and randomly selected roadside locations. The related Periodic Smoke Inspection Program requires that diesel fleet owners conduct annual smoke opacity inspections of their vehicles and repair

those with excessive smoke emissions to ensure compliance. CARB randomly audits fleets, maintenance and inspection records and tests a representative sample of vehicles. All vehicles that do not pass the test must be repaired and retested. In July 2018, CARB approved amendments to the regulations, which require heavy-duty vehicles to meet a more stringent opacity limit of 5 percent opacity for most vehicles. The new opacity limit went into effect July 1, 2019. In addition, each vehicle operating in California - including those in transit from Mexico, Canada, or any other state - must be equipped with engines that meet California and/or EPA or equivalent emission standards and must maintain an Emission Control Label. Heavy-duty trucks used for proposed project activities would be subject to these inspection programs.

California Diesel Fuel Program

The California diesel fuel program set stringent standards for California diesel that produced cost-effective emission reductions from diesel-powered vehicles. The diesel fuel program set specifications for aromatic hydrocarbons and sulfur and also established a lubricity standard.

Portable Engine Airborne Toxic Control Measure

The California Portable Engine Airborne Toxic Control Measure is designed to reduce the PM emissions from portable diesel-fueled engines rated at 50 brake horsepower or larger. Any electric or gas-powered backpack sprayer engines, or vehicle-mounted pump engines, such as dewatering pumps, that are smaller than 50 brake horsepower, would be exempt from this program. Portable diesel-fueled engines rated at 50 brake horsepower or larger are not expected to be used during proposed project activities.

Portable Equipment Registration Program

The statewide Portable Equipment Registration Program establishes a system to uniformly regulate portable engines and portable engine-driven equipment units. After being registered in this program, engines and equipment units may operate throughout the state without the need to obtain individual permits from air districts, although operation of registered portable engines still may be subject to certain district requirements for reporting and notification. Owners or operators of portable engines and certain types of equipment can voluntarily register their units under this program, while engines with less than 50 brake horsepower are exempt. Some of the engines used for the proposed project activities (i.e., those with less than 50 brake horsepower) would be exempt.

Senate Bill (SB) 709

SB 709 amends the Health and Safety Code to give the SJVAPCD more responsibility in terms of permitting, fee implementation, and agricultural assistance, as well as the authority to require the use of Best Available Control Technology (BACT) for existing emission sources, promote cleaner-burning alternative fuels, and encourage and facilitate ridesharing. SB 709 also amends the Vehicle Code to allow the San Joaquin Valley Air Pollution Control District (SJVAPCD) to adopt a surcharge on motor vehicle registration fees.

Regional Policies and Regulations

San Joaquin Valley Air Pollution Control District

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is primarily responsible for assuring that the federal and State ambient air quality standards are attained and maintained in the San Joaquin Valley. Under State law, the SJVAPCD is required to prepare a plan for air quality improvement for pollutants for which the basin is in non-compliance. SJVAPCD has adopted numerous attainment plans to reduce ozone and particulate precursor emissions since 1992. Most recently, SJVAPCD

adopted the 2016 Ozone Plan to bring the San Joaquin Valley into attainment of the federal 2008 8-hour ozone standard by December 31, 2031. The Ozone Plan describes a comprehensive stationary and mobile source control strategy to reduce NO_x emissions by over 60 percent between 2012 and 2031.

SJVAPCD adopted the 2024 PM_{2.5} Plan as a single comprehensive attainment plan that addresses multiple PM_{2.5} standards under the Federal Clean Air Act (FCAA). Most recently, SJVAPCD adopted the 2024 Plan for the 2012 PM_{2.5} Standard, which addresses the EPA federal annual PM_{2.5} standard of 12 µg/m³ established in 2012. The 2024 Plan demonstrates expeditious attainment of the 2012 PM_{2.5} standard by 2030. In 2021 EPA reclassified the region to “Non-Attainment/Serious”.

The SJVAPCD has implemented several regulations and rules, some of which are relevant to the proposed project. Applicability of each rule and regulation is described below.

SJVAPCD Rule 2020, Exemptions from Authority to Construct or Permit to Operate

Rule 2020 specifies emissions units that are not required to obtain an Authority to Construct or Permit to Operate under Rule 2201 (see below). An “emissions unit” is defined as an identifiable operation or piece of process equipment such as a source operation which emits, may emit, or results in the emissions of any affected pollutant directly or as fugitive emissions.

The rule exempts portable emissions units that have obtained a valid registration under Rule 2280 (see below) and specifically exempts portable generators that provide supplemental power during power interruptions, as long as the generator is not used for more than 60 calendar days. If operation of the proposed project were to include a backup standby generator, it may qualify under this exemption. Prior to the start of construction, DPWD would contact the SJVAPCD Small Business Assistance Office to determine if an Authority to Construct or Permit to Operate are required for the backup standby generator.

SJVAPCD Rule 2201, New and Modified Stationary Source Review

Rule 2201 applies to new or modified stationary sources and requires that sources not increase emissions above specified thresholds. Best Available Control Technology (BACT) requirements are triggered on a pollutant-by-pollutant basis and on an emission unit-by-emissions unit basis for any new emissions unit with a potential to emit exceeding certain limits. If a new stationary source exceeds thresholds offsets are required. Offset requirements are triggered on a pollutant-by-pollutant basis. The Proposed Project would include one new stationary source: a diesel-powered emergency generator at the pumping plant. The emergency generator would need to be permitted by the SJVAPCD and would have to comply with BACT requirements, but would not be subject to offset thresholds, which do not apply to emergency equipment that is used exclusively as emergency standby equipment for electric power generation.

SJVAPCD Rule 2280, Portable Equipment Registration

Portable equipment used at project sites for less than 6 consecutive months, such as diesel fired piston type internal combustion engines and spark ignition internal combustion engines, must be registered with either CARB or the SJVAPCD. Portable equipment used during project construction may have to comply with this rule. The proposed project would have a standby/emergency generator that would be used in the event of a power outage, but because it would be subject to New and Modified Stationary Source Review, it would not be subject to this rule.

SJVAPCD Rule 4002, National Emissions Standards for Hazardous Air Pollutants

Rule 4002 regulates emissions of asbestos associated with demolition and renovation projects. This rule would not be applicable to the proposed project activities because construction would not include renovation or demolition of existing buildings.

SJVAPCD Rule 4102, Nuisance

Rule 4102 prohibits emissions of air contaminants that would cause a nuisance to “considerable numbers of persons or the public.” This rule would be applicable to the proposed project.

SJVAPCD Rule 4201 and Rule 4202, Particulate Matter Concentration and Emission Rates

Rule 4201 and Rule 4202 are applicable to the proposed project activities because they apply to operations that emit or may emit dust, fumes, or total suspended particulate matter. Particulate emissions must be less than the specified emissions limit.

SJVAPCD Rule 4601, Architectural Coatings

Rule 4610 specifies limits on VOC content of architectural coatings such as paint and would be applicable to any coatings used during project construction or maintenance activities. The VOC content of architectural coatings applied at the project site during construction would not exceed 100 grams VOC per liter for coating of piping, valves, pumps, tanks, and other on-site structures.

SJVAPCD Rule 4641, Cutback, Slow Cure, and Emulsified Asphalt, Paving, and Maintenance Operations

Rule 4641 limits VOC emissions by restricting the application and manufacturing of certain types of asphalt for paving and maintenance operations. Project construction and maintenance would comply with this rule.

SJVAPCD Rule 8011, General Requirements – Fugitive Dust Emission Sources

Fugitive dust regulations are applicable to outdoor fugitive dust sources. Project operations, including construction operations, must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII: Control Measures for Construction Emissions of PM₁₀. According to Rule 8011, the SJVAPCD requires the implementation of control measures for fugitive dust emission sources. Fugitive Dust management plans must be submitted to the SJVAPCD. The project would also implement the mandatory control measures listed in Table 6-2 in the Guidance for Assessing and Mitigating Air Quality Impacts (SJVAPCD 2015) to reduce fugitive dust emissions, which are listed below:

All disturbed areas, including storage piles, which are not being actively utilized for construction purposes shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.

All onsite unpaved roads and offsite unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.

All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.

With the demolition of buildings up to six stories in height, all exterior surfaces of the building shall be wetted during demolition.

When materials are transported offsite, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.

All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday.

Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.

In urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.

An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall implement measures to prevent carryout and trackout.

SJVAPCD Rule 9510, Indirect Source Review

Rule 9510 applies to any applicant seeking discretionary approval for a development project. Rule 9510 defines a development project to include any project that will result in the construction of a new building, facility, or structure (Section 3.13), and explains that the rule applies to any development project that would include 9,000 square feet of space at full build out (Section 2.0). Therefore, the proposed project would be subject to Indirect Source Review and would be required to submit an Air Impact Assessment (AIA) application to the SJVAPCD no later than applying for final discretionary approval. Compliance with Rule 9510, Indirect Source Review, would be a condition of project approval.

Voluntary Emission Reduction Agreements

The SJVAPCD administers a program to assist project proponents in mitigating air quality impacts by entering into a Voluntary Emission Reduction Agreement (VERA). These agreements provide a mechanism under which project proponents can voluntarily enter into a contractual agreement with the SJVAPCD to mitigate their project's impacts on air quality. Once entered into, VERAs become legally enforceable mechanisms for achieving air quality mitigation. Dollars provided by the project proponent are reinvested within the San Joaquin Valley Air Basin to reduce emissions. Using incentive grant programs, the funds provided through the VERA are awarded to Valley businesses, residents, and municipalities to generate real and quantifiable reductions in emissions. The following are some examples of how such funds can be utilized to reduce air pollution:

Grants to Valley businesses and municipalities to replace old trucks with new low-emission trucks;

Grants to Valley businesses and municipalities to electrify or replace existing diesel-powered off-road equipment;

Grants to Valley residents to replace fireplaces and non-certified wood burning stoves with clean-burning EPA certified units;

Grants to Valley residents through the District's Tune-In-Tune-Up program to repair older high-polluting vehicles;

Grants to Valley residents to purchase cleaner vehicles; and

Grants to Valley school districts to replace older and high-polluting school buses.

The emission reductions secured through VERAs are “surplus” to existing regulations, achieving reductions earlier or beyond those required by regulations. The SJVAPCD’s incentive programs have invested over \$1 billion in public and private funding for clean air projects reducing more than 100,000 tons of emissions. VERAs must be adopted before the start of project construction to ensure that emissions reductions and project emissions occur at the same time.

VERAs provide two emission reduction options: either the pollutant by pollutant option under which each pollutant is mitigated individually to the respective significance threshold level, or the net-zero option, which provides that the sum of NO_x, VOC and PM₁₀ combined emissions is fully mitigated by the sum of NO_x, VOC and PM₁₀ combined emissions reductions achieved under the VERA. The net zero mitigation option recognizes that NO_x is the critical component in San Joaquin Valley air quality issues and considers impacts to be less than significant for these three pollutants even if VOC or PM₁₀ emissions remain above their individual significance thresholds after mitigation.

SJVAPCD CEQA Guidelines

The SJVAPCD prepared the Guidance for Assessing and Mitigating Air Quality Impacts to assist lead agencies and project applicants in evaluating the potential air quality impacts of projects in the San Joaquin Valley Air Basin (SJVAPCD 2015). It provides SJVAPCD-recommended procedures for evaluating potential air quality impacts from short-term (construction) and long-term (operational) air emissions during the CEQA environmental review process. It contains guidance on thresholds of significance and mitigation measures for criteria pollutant emissions, ambient air quality, toxic air contaminants, odors, accidental releases, and cumulative impacts.

SJVAPCD Ambient Air Quality Analysis – Stationary Source Projects

The SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts (SJVAPCD 2015) recommends that an ambient air quality analysis be performed when the increase in on-site emissions from construction activities exceeds the 100 pounds per day screening level of any criteria pollutant, after implementation of all enforceable mitigation measures. Likewise, for operational emissions, the Guidance recommends that an ambient air quality analysis be performed when the increase in on-site emissions from permitted or non-permitted equipment and activities exceeds the 100 pounds per day screening level of any criteria pollutant, after implementation of all enforceable mitigation measures. If an ambient air quality analysis is performed, the analysis should include emissions from both project specific permitted and non-permitted equipment and activities.

Local Policies and Regulations

Stanislaus County

The Stanislaus County General Plan has the following applicable air quality policies:

Goal Six: Improve Air Quality

Policy Eighteen: The County will promote effective communication, cooperation, and coordination among agencies involved in developing and operating local and regional air quality programs.

Implementation Measure 1: Refer discretionary projects under CEQA review to the SJVAPCD, neighboring jurisdictions and other affected agencies for review and comment.

Implementing Measure 2. Work with other agencies in the San Joaquin Valley to establish coordinated air quality programs and implementation measures.

Policy Nineteen: The County will strive to accurately determine and fairly mitigate the local and regional air quality impacts of proposed projects.

Implementation Measure 1: Require all development proposals, where appropriate, to include reasonable air quality mitigation measures.

Implementation Measure 2: Minimize case-by-case analysis of air quality impacts through the use of standard criteria for determining significant environmental effects, a uniform method of calculating project emissions, and standard mitigation methods to reduce air quality impacts.

Biological Resources

This section lists laws and regulations at the Federal level that may apply to the project.

Endangered Species Act

Pursuant to the Endangered Species Act (ESA), the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) have authority over projects that may result in take of a species listed as threatened or endangered under the act. Take is defined under the ESA, in part, as killing, harming, or harassing. Under federal regulations, take is further defined to include habitat modification or degradation that results, or is reasonably expected to result, in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. If a likelihood exists that a project would result in take of a federally listed species, either an incidental take permit, under Section 10(a) of the ESA, or a federal interagency consultation, under Section 7 of the ESA, is required.

One Habitat Conservation Plan was found to overlap with the study area, the PG&E San Joaquin Valley Operations and Maintenance Habitat Conservation Plan (PG&E HCP). The PG&E HCP allows PG&E to comply with the federal and state endangered species acts for small-scale temporary effects in the San Joaquin Valley. The PG&E HCP enables PG&E to conduct current and future operations and maintenance activities while minimizing, avoiding, and compensating for effects on listed species. Activities covered by the plan include gas pipeline protection, recoating, repair and replacement; electric line protection, repair, reconductoring, and replacement; electric pole repair/replacement; vegetation management to maintain clearances around facilities; minor new gas and electric extensions, and mitigation areas for impacts result from covered activities. The study area falls within the PG&E HCP plan area and covers many of the same species that have a potential to occur in the study area, including but not limited to vernal pool fairy shrimp, valley elderberry longhorn beetle, California tiger salamander, California red-legged frog, Swainson's hawk, and San Joaquin kit fox. The proposed action's relocation of electric transmission lines would not be covered under the PG&E HCP.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act, as amended in 1964, was enacted to protect fish and wildlife when federal actions result in the control or modification of a natural stream or body of water. The statute requires federal agencies to take into consideration the effect that water-related projects would have on fish and wildlife resources. Consultation and coordination with USFWS is required to address ways to prevent loss of and damage to fish and wildlife resources, and to further develop and improve these resources. Reclamation will coordinate with USFWS through their Section 7 ESA consultation with USFWS and the review of this EIS by USFWS.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) domestically implements a series of international treaties that provide for migratory bird protection. The MBTA authorizes the Secretary of the Interior to regulate

the taking of migratory birds. The act further provides that it is unlawful, except as permitted by regulations, “to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird...” (16 USC 703). This prohibition includes both direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the MBTA can be found in the March 1, 2010 Federal Register (75 FR 9281). This list comprises several hundred species, including essentially all native birds. Permits for take of nongame migratory birds can be issued only for specific activities, such as scientific collecting, rehabilitation, propagation, education, taxidermy, and protection of human health and safety and of personal property. USFWS publishes a list of birds of conservation concern (BCC) to identify migratory nongame birds that are likely to become candidates for listing under ESA without additional conservation actions. The BCC list is intended to stimulate coordinated and collaborative conservation efforts among federal, state, tribal, and private parties. As discussed above non-special-status migratory birds have the potential to nest in the study area and Project Partners will comply with the MBTA.

The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) (16 USC 668) prohibits take and disturbance of individuals and nests. Take permits for birds or body parts are limited to religious, scientific, or falconry pursuits. However, the BGEPA was amended in 1978 to allow mining developers to apply to USFWS for permits to remove inactive golden eagle (*Aquila chrysaetos*) nests in the course of “resource development or recovery” operations. With the 2007 removal of bald eagle from the ESA list of threatened and endangered species, USFWS issued new regulations to authorize the limited take of bald eagles (*Haliaeetus leucocephalus*) and golden eagles under the BGEPA, where the take to be authorized is associated with otherwise lawful activities. A final Eagle Permit Rule was published on September 11, 2009 (74 FR 46836–46879; 50 CFR 22.26). A permit authorizes limited, non-purposeful take of bald eagles and golden eagles, and can be applied for by individuals, companies, government agencies (including tribal governments), and other organizations to allow disturbance or otherwise take eagles in the course of conducting lawful activities, such as operating utilities and airports. Under BGEPA, take is defined as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest or disturb.” Disturb is defined in the regulations as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available: (1) injury to an eagle; (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.” Most permits issued under the new regulations authorize disturbance. In limited cases, a permit may authorize the physical take of eagles, but only if every precaution is first taken to avoid physical take. The Project Partners will comply with the BGEPA.

Clean Water Act

Wetlands include waters of the United States, as defined under the 2023 Rule (40 Code of Federal Regulations [CFR] 120.2[a]) and the identical U.S. Army Corps of Engineers (USACE) definition (33 CFR 328.3[c][16]) are protected under Section 404 of the Clean Water Act. Waters of the United States means waters that are (1) currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide; (2) impoundments of waters otherwise defined as waters of the United States under this definition; (3) tributaries of waters that are relatively permanent, standing, or continuously flowing bodies of water; (4) wetlands adjacent to waters; and (5) intrastate lakes and ponds, streams, or wetlands that are relatively permanent, standing, or continuously flowing bodies of water with a continuous surface connection to the waters identified in 33 CFR 328.3(c)(16).

Wetlands subject to federal jurisdiction include riparian woodlands, riparian wetlands, seasonal wetlands, seeps, and ponds. A request for a preliminary jurisdictional determination was submitted to the USACE on April 8, 2020. On June 17, 2020, the USACE provided concurrence, stating that approximately 32.05 acres of wetlands and approximately 6.16 acres of other waters present within the survey area are potential jurisdictional aquatic resources (i.e., waters of the United States) regulated under Section 404 of the Clean Water Act.

Cultural Resources

Section 106 of the National Historic Preservation Act

U.S.C. Title 54, Section 306108, commonly known as Section 106 of the NHPA of 1966, outlines the federal government's responsibility regarding effects on historic properties and its implementing regulations found at CFR Part 800. Executive Order (EO) 13007 applies to sacred sites on federal lands that have been identified by federally recognized tribes. The Archaeological Resources Protection Act (ARPA) of 1979 (PL 96-95; 93 Stat. 721; 16 U.S.C., Sections 470[aa]–470[mm], as amended; PL 100-555; PL 100-588) establishes requirements for permits to excavate archaeological resources (also addressed in RM D&S LND 02-04 and LND 08-01 [item 13]). Under the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. 3001) and its implementing regulations (43 Code of Federal Regulations [CFR] Part 10), the Bureau of Reclamation (Reclamation) is responsible for the protection of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony discovered on Reclamation lands. In some cases, certain state laws may be applicable, including, but not limited to, the California Environmental Quality Act (CEQA) and California Public Resources Code (PRC) Section 5097.98.

Energy Resources

Federal Policies and Regulations

National Energy Conservation Policy Act

The National Energy Conservation Policy Act serves as the underlying authority for federal energy management goals and requirements. Signed into law in 1978, it is regularly updated and amended by subsequent laws and regulations. This act is the foundation of most federal energy requirements.

National Energy Policy Act of 2005

The National Energy Policy Act of 2005 sets equipment energy efficiency standards and seeks to reduce reliance on nonrenewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products, including hybrid vehicles; constructing energy-efficient buildings; and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment. Executive Order 13423 (Strengthening Federal Environmental, Energy, and Transportation Management), signed in 2007, strengthens the key energy management goals for the federal government, and sets more challenging goals than the Energy Policy Act of 2005. The energy reduction and environmental performance requirements of Executive Order 13423 were

expanded upon in Executive Order 13514 (Federal Leadership in Environmental, Energy, and Economic Performance) signed in 2009 (Federal Register 2009).

U.S. Department of Energy Integral Horsepower Motor Rule (10. CFR Part 431)

The U.S. Department of Energy (DOE) Integral Horsepower Motor Rule, effective as of June 1, 2016, establishes efficiency requirements that cover 1-500 horsepower (Hp) (0.75 370 kW) three phase electric motors. This law superseded the existing Energy Independence and Security Act of 2007. Several categories of motors were previously covered at lower efficiency levels or exempt.

The motors regulated under the expanded scope meet the following nine characteristics:

1. Is a single speed motor
2. Is rated for continuous duty (MG 1) operation or for duty type S1 (IEC)
3. Contains a squirrel-cage (MG 1) or cage (IEC) rotor
4. Operated on polyphase alternating current (AC) 60-hertz sinusoidal line power
5. Has 2-, 4-, 6-, or 8-pole configuration
6. Is rated 600 volts or less
7. Have a three or four-digit NEMA frame size (or IEC metric equivalent), including those designs between two consecutive NEMA frame sizes (or IEC metric equivalent) or an enclosed 56 NEMA Frame size (or IEC metric equivalent)
8. Has no more than 500 horsepower, but greater than or equal to 1 horsepower (or kilowatt equivalent)
9. Meets all the performance requirements of a NEMA design A, B or C electric motor or an IEC design N or H electric motor

As indicated above, the voltage range for motors covered by the scope of the policy includes those less than 600 volts, and less than 500 Hp. Submersible motors are not covered under this rule (CFR 2019).

State Policies and Regulations

California Energy Action Plan

California's Energy Action Plan II, developed by the CPUC and the California Energy Commission (CEC), is the state's principal energy planning and policy document (CPUC and CEC 2005). The plan describes a coordinated implementation plan for state energy policies and refines and strengthens California's original Energy Action Plan I published in 2003. California Energy Action Plan II identifies specific action areas to ensure that California's energy is adequate, affordable, technologically advanced, and environmentally sound. It adopts a loading order of preferred energy resources to meet the state's needs and reduce reliance on natural gas and other fossil fuels.

The plan identifies energy efficiency and demand response¹ as the primary ways to meet the energy needs of California's growing population, and it identifies renewable energy and distributed generation² as the best ways on the supply side. To the extent that energy efficiency, demand response,

¹ Demand response is the reduction of customer energy usage during peak periods in order to address system reliability and support the best use of energy infrastructure.

² Distributed generation is electrical generation and storage that is performed by a variety of small, grid-connected or distribution system connected devices referred to as distributed energy resources.

renewable resources, and distributed generation are unable to satisfy increasing energy and capacity needs, CEC supports clean and efficient fossil fuel-fired generation. The 2008 Energy Action Plan Update provided a status update to the 2005 Energy Action Plan II and continues the goals of the original California Energy Action Plan (CPUC and CEC 2008).

California Energy Code

The California Energy Code, also referenced as California Building Energy Efficiency Standards, contains energy conservation standards applicable to most residential and nonresidential buildings throughout California. California's energy code is designed to reduce wasteful and unnecessary energy consumption in newly constructed and existing buildings. The CEC updates the Building Energy Efficiency Standards (Title 24, Parts 6 and 11) every three years in a public process (CEC 2019a). Title 24 presents a set of requirements for energy conservation in building design, construction, and retrofit, that apply to identified structural, mechanical, electrical, HVAC, and plumbing elements.

Senate Bill 100

SB 100, passed into law in 2018, accelerated the state's timeline for moving to renewable energy and carbon-free energy sources. SB 100 established renewable energy portfolio standards for power providers, mandating all retail electricity come from 100 percent renewable electricity sources by 2045. In addition to the 2045 target, SB 100 also requires electric utilities and other service providers to generate 60 percent of their power from renewable sources by 2030, up from the former 50 percent goal set for that date by SB 350, which was signed in 2015.

State Alternatives Fuels Plan

The State Alternatives Fuel Plan (California Air Resources Board [CARB] and CEC 2007) presents strategies and steps that California must take to increase the use of alternative non-petroleum fuels. The plan recommends alternative fuel targets of 9 percent in 2012, 11 percent in 2017, and 26 percent by 2022. The plan also presents a 2050 vision that extends the plan outcomes and presents a transportation future that greatly reduces the energy needed for transportation, provides energy through a diverse set of transportation fuels, and eliminates over-dependency on oil. With these goals, more than 4 billion gasoline gallon equivalents (20 percent) would be displaced by alternative fuels in 2020. CEC estimates that by 2050, alternative fuels could provide more than half of the energy needed to power California's transportation system.

Local Policies and Regulations

Stanislaus County Code

As described in the Stanislaus County Code, Title 16: Building and Construction, Chapter 16.65: Energy Code, Stanislaus County has adopted the California Energy Code, as published by the International Code Council, 2016 Edition, and Appendix 1-A as the Energy Code of the County. (Stanislaus County 2017).

Geology

Local Policies and Regulations

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was adopted in 1972 and is designed to restrict certain development along active faults. The Act requires that the State Geologist delineate earthquake fault zones around the surface traces of active faults and to maintain maps outlining these zones. Active faults are defined as faults that have been active within the last 11,000 years. The purpose of these zones is to prevent the construction of buildings used for human occupancy within an earthquake fault zone. In addition to delineating earthquake fault zones, the Act requires disclosure of properties located within an earthquake fault zone when buying or selling a property. The Act was first designated as the Alquist-Priolo Geologic Hazard Zones Act but was later changed to the Alquist-Priolo Special Studies Zones Act in 1975 and changed again in 1994 to the Alquist-Priolo Earthquake Fault Zoning Act (CGS 2007). The proposed project is not located within a Fault-Rupture Hazard Zone designated by the Alquist-Priolo Earthquake Fault Zoning Act of 1972 and Special Publication 42.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act and related regulations establish a statewide minimum public safety standard for mitigation of earthquake hazards. According to this act, the minimum level of mitigation should reduce the risk of ground failure during an earthquake to a level that does not cause the collapse of buildings for human occupancy, but, in most cases, not to a level of no ground failure at all. Nothing in the act precludes public agencies from enacting more stringent requirements, or from requiring a higher level of performance.

California Building Code

The California Building Code (CBC), which is codified in California Code of Regulations (CCR) Title 24, Part 2, was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards related to structural strength, egress facilities, and general building stability. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all building and structures within its jurisdiction. Title 24 is administered by the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable.

The CBC is based on the International Building Code. The 2007 CBC is based on the 2006 International Building Code published by the International Code Conference. In addition, the CBC contains necessary California amendments that are based on the American Society of Civil Engineers (ASCE) Minimum Design Standards 7-05. ASCE 7-05 provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (flood, snow, wind, etc.) for inclusion in building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, all of which are used to determine a Seismic Design Category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site and ranges from SDC A (very small

seismic vulnerability) to SDC E/F (very high seismic vulnerability and near a major fault). Design specifications are then determined according to the SDC. Compliance with the CBC would be necessary for structures at the new pumping plant and possibly for certain grading activities on the project site.

California Department of Water Resources Division of Safety of Dams (DSOD)

DSOD reviews plans and specifications for the construction of new dams or for the enlargement, alteration, repair, or removal of existing dams. DSOD must grant written approval before construction can proceed on any dam under DSOD jurisdiction. Dams under the jurisdiction of DSOD are defined in the California Water Code (Division 3, Dams and Reservoirs; Part 1, Supervision of Dams and Reservoirs; Chapter 1, Definitions).

The proposed dam would be subject to DSOD jurisdiction. A construction application, combined with plans, specifications and other requirements would be filed with DSOD. For engineering analysis, DSOD requires a deterministic seismic hazard analysis, which yields estimates of the level of ground shaking due to an earthquake occurring on identified faults. The dam would be designed to withstand groundshaking as determined by the seismic hazard analysis. Section 2.4.4 in Chapter 2, Project Description, details applicable design criteria for construction of the dam to meet DSOD requirements. The engagement and interactions between the Project Partners and DSOD follow a prescribed, structured regulatory process. DSOD would only approve the application after all dam safety related issues are resolved.

California Public Resources Code

Several sections of the California Public Resources Code protect paleontological resources. Section 5097.5 prohibits “knowing and willful” excavation, removal, destruction, injury, and defacement of any paleontological feature on public lands (lands under state, county, city, district, or public authority jurisdiction, or the jurisdiction of a public corporation), except where the agency with jurisdiction has granted express permission. Section 30244 requires reasonable mitigation for impacts on paleontological resources that occur as a result of development on public lands.

Local Policies and Regulations

Stanislaus County General Plan

The Stanislaus County General Plan guides development for the County with a 20-year planning horizon. The following policies outlined in the Agricultural and Safety elements of the County’s General Plan would apply to the project.

The Safety Element of the County’s general plan has two goals related to geologic and seismic hazards. Each is supported by policies and implementation measures.

GOAL ONE. Prevent loss of life and reduce property damage as a result of natural disasters.

POLICY THREE. Development should not be allowed in areas that are particularly susceptible to seismic hazard.

Implementation Measures

1. The County shall enforce the Alquist-Priolo Earthquake Fault Zoning Act.
2. Development in areas of geologic hazard shall be considered for approval only where the development includes an acceptable evacuation route.

3. Development proposals adjacent to reservoirs shall include evaluations of the potential impacts from a seismically induced seiche.
4. The routes of new public roads in areas subject to significant seismic hazard shall be designed to minimize seismic risk.
5. Where it is found that right-of-way widths greater than those specified in the Circulation Element are necessary to provide added safety in geologically unstable areas, additional width shall be required.

POLICY FOUR. Development west of I-5 in areas susceptible to landslides (as identified in this element) shall be permitted only when a geological report is presented with (a) documented evidence that no such potential exists on the site, or (b) identifying the extent of the problem and the mitigation measures necessary to correct the identified problem.

Implementation Measures

1. The County shall utilize the California Environmental Quality Act (CEQA) process to ensure that development does not occur that would be especially susceptible to landslide. Most discretionary projects require review for compliance with CEQA. As part of this review, potential impacts must be identified and mitigated or a statement of overriding concerns adopted.
2. Development west of I-5 shall include a geological report unless the Chief Building Official and Planning Director are satisfied that no need for the study is present.
3. The routes of new public roads in areas subject to landslides shall be designed to minimize landslide risks.

POLICY FIVE. Stanislaus County shall support efforts to identify and rehabilitate structures that are not earthquake resistant.

Implementation Measures

1. The County shall take advantage of programs that would provide funds to identify and rehabilitate structures that do not currently meet building standard minimums for earthquake resistance.

GOAL TWO. Minimize the effects of hazardous conditions that might cause loss of life and property.

POLICY FOURTEEN. The County will continue to enforce state-mandated structural Health and Safety Codes, including but not limited to the Uniform Building Code, the Uniform Housing Code, the Uniform Fire Code, the Uniform Plumbing Code, the National Electric Code, and Title 24. (Comment: The Uniform Building Code includes provisions for safe construction under the most current standards. The Uniform Housing Code provides for upgrading of existing dwellings to eliminate health and safety problems without requiring upgrading of non-hazardous conditions.)

Implementation Measures

1. All building permits shall be reviewed to ensure compliance with the Uniform Building Code.
2. All complaints of substandard dwellings shall be acted upon to ensure compliance with the Uniform Housing Code.

3. The Uniform Fire Code shall be followed in inspections and maintenance of structures regulated under that code.

The Conservation Element of the County's general plan has one policy and various implementation measures related to geologic and seismic hazards.

GOAL FIVE. Reserve, as open space, lands subject to natural disaster in order to minimize loss of life and property of residents of Stanislaus County.

POLICY SIXTEEN. Discourage development on lands that are subject to flooding, landslide, faulting or any natural disaster to minimize loss of life and property.

Implementation Measures

1. Enforce the provisions of the Alquist-Priolo Earthquake Fault Zoning Act.
2. Development will not be permitted in floodways unless it meets the requirements of Chapter 16.40 of the County Code and is approved by the State Reclamation Board.
3. Development proposals in an area identified as having unstable soils (bluff, landslide areas in the foothills, etc.) shall include measures for mitigating possible hazards.
4. The County shall enforce the subdivision ordinance requirement for soils reports, which may be required to include a geologic report.
5. The County shall utilize the California Environmental Quality Act (CEQA) process to ensure that development does not occur that would be subject to natural disasters.

The Conservation Element of the Stanislaus County General Plan addresses paleontological resources.

GOAL EIGHT. Preserve areas of national, state, regional, and local historical importance.

POLICY TWENTY-FOUR. The County will support the preservation of Stanislaus County's cultural legacy of archeological, historical, and paleontological resources for future generations.

Implementation Measure. The County shall utilize the California Environmental Quality Act (CEQA) process to protect archaeological, historic, or paleontological resources. Most discretionary projects require review for compliance with CEQA. As part of this review, potential impacts must be identified and mitigated.

Hazards

Hazardous materials and wastes can result in public health hazards if released to soil, groundwater, or air. Hazardous materials as defined in Section 25501(o) of the California Health and Safety Code are materials that, because of their "quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released to the workplace or environment." Hazardous materials have been and are commonly used in commercial, agricultural, and industrial applications, as well as to a limited extent in residential areas.

A waste is any material that is relinquished, recycled, or inherently waste-like. CCR Title 22 Section 66261.1, et seq. contains regulations for the classification of hazardous wastes. Article 3 criteria classify waste as hazardous if it is toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases). Article 4 also lists specific hazardous wastes, while Article 5 identifies specific waste

categories, including Resource Conservation and Recovery Act (RCRA) hazardous wastes, non-RCRA hazardous wastes, extremely hazardous wastes, and special wastes. If improperly handled and released to soil, groundwater, or air (in the form of vapors, fumes, or dust), hazardous materials and wastes can result in public health hazards.

Federal Policies and Regulations

Resource Conservation and Recovery Act (RCRA)

RCRA regulates potential health and environmental problems associated with solid waste hazards and nonhazardous waste. RCRA defines solid waste as garbage or refuse, sludge from wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded materials. Solid waste can be either hazardous or non-hazardous. Hazardous waste is waste that burns readily, is corrosive, or reactive, or if it contains certain amounts of toxic chemicals, or has been included on the U.S. EPA's list of hazardous wastes. RCRA regulates the disposal of waste and aims to reduce waste generation. It restricts which facilities can receive hazardous wastes and regulates facilities to ensure proper handling of materials.

Emergency Planning and Community Right-To-Know Act (EPCRA)

EPCRA was passed in 1986 and requires federal, state, and local governments to create chemical emergency response plans for releases of hazardous substances. It also requires reporting on hazardous and toxic chemicals to increase awareness and access to information on chemical and individual facilities. It requires that facilities report accidental releases of certain chemicals and hazardous substances, and provide such information to the public. Facilities must create and make available Material Safety Data Sheets (MSDS) that describe the chemicals in question and health effects associated with them. Chemical inventories must also be reported if they require an MSDS.

Hazardous Materials Worker Safety Requirements

The federal Occupational Safety and Health Administration (OSHA) is the federal agency responsible for ensuring worker safety. The federal regulations for worker safety are contained in CFR Title 29, as authorized in the Occupational Safety and Health Act of 1970; these regulations provide standards for safe workplaces and work practices, including those relating to hazardous materials handling.

Preliminary Remediation Goals

USEPA has published screening levels, referred to as Regional Screening Levels (RSLs), for the evaluation of chemicals commonly found in soil or groundwater where a release of hazardous materials has occurred (USEPA 2019). For an industrial worker, these screening levels are conservative estimates of safe levels of a chemical that a worker could be exposed to in soil and groundwater. If the concentration of a chemical in the soil or groundwater is below the RSL, then it can be assumed that the chemical would not pose a health risk to the worker. Screening levels would generally be lower for industrial workers than construction workers because the industrial worker would be exposed to the hazard over a lifetime while the construction worker would only be exposed for the duration of construction. Therefore, safe levels of chemicals in soil and groundwater would generally be higher for construction workers than industrial workers.

Risk Management Plan

The EPA created regulations and guidance for chemical accident prevention at facilities using substances that posed the greatest risk of harm from accidental releases. Under the authority of Section 112(r) of the Clean Air Act, the Chemical Accident Prevention Provisions creates require facilities that

produce, handle, process, distribute, or store certain chemicals to develop a Risk Management Program, prepare a Risk Management Plan, and submit the plan to EPA.

State Policies and Regulations

California Health and Safety Code

The California Health and Safety Code contains statewide regulations designed to protect public health and safety. Sections of the state code relevant to the proposed project/action include the Hazardous Materials and the Hazardous Waste and Substances Site List (Cortese List), which is developed under Section 65962.5 of the California Government Code. The list is compiled and maintained by the DTSC under the California EPA. The Cortese List is a list of all sites identified as having hazardous waste releases.

Facilities that handle, store, use, treat, dispose of, or generate hazardous materials are required to create hazardous-waste management programs under Division 20, Chapter 6.5, section 25100 et seq. Facilities that generate hazardous wastes in excess of 26,400 pounds per year, or extremely hazardous wastes in excess of 26.4 pounds per year, must adhere to California Health and Safety Code Section 25244.12 et seq. This section of the code requires facilities to determine the types and amounts of wastes generated, identify procedures to reduce waste generation, develop written documentation that addresses waste reduction, develop a source-reduction evaluation review and plan, prepare a plan summary and hazardous waste management report, and a report summary. Hazardous materials handling, reporting requirements, and local agency surveillance programs are regulated under the California Health and Safety Code, Section 25500 et seq.

Transportation of Hazardous Wastes

Regulatory requirements for the transport of hazardous wastes in California are specified in CCR Title 22 Division 4.5 Chapters 13 and 29. In accordance with these regulations, all hazardous waste transporters must have identification numbers issued by either the USEPA or the California Department of Toxic Substances Control (DTSC) to identify whether the waste is classified as hazardous by federal regulations or under California regulations. Hazardous waste transporters must comply with the California Vehicle Code, California Highway Patrol regulations (CCR, Title 13), the California State Fire Marshal regulations (CCR Title, 19), U.S. Department of Transportation regulations (CFR, Title 49), and USEPA regulations (CFR, Title 40). California regulations specify specific cleanup actions that must be taken by a hazardous waste transporter in the event of a discharge or spill, and for the safe packaging and transport of hazardous wastes.

California Fire Code

The California Fire Code, Article 80, includes specific requirements for the safe storage and handling of hazardous materials. These requirements reduce the potential for a release of hazardous materials and for the mixing of incompatible chemicals, and specify design features to reduce the potential for a release of hazardous materials that could affect public health or the environment, including:

Separation of incompatible materials with a noncombustible partition

Spill control in all storage, handling, and dispensing areas

Separate secondary containment for each chemical storage system

The California Fire Code, Article 79, includes specific requirements for the safe storage and handling of flammable and combustible liquids. Specific requirements address:

Fire protection

Prevention and assessment of unauthorized discharges

Labeling and signage

Protection from sources of ignition

Specifications for piping, valving, and fittings

Maintenance of above-ground tanks

Requirements for storage vessels, vaults, and overfill protection

Requirements for dispensing, using, mixing, and handling of flammable and combustible liquids

Division of Oil, Gas, and Geothermal Resources (DOGGR)

The California Department of Conservation, DOGGR oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal wells. DOGGR also oversees enhanced recovery projects that try to maximize production from the state's oil reservoirs. The regulatory program implemented by DOGGR includes acting as a clearinghouse for information about the state's oil, natural gas and geothermal industries, monitoring the proper installation and maintenance of blowout prevention equipment, regulating well design, ensures that idle and orphan wells are properly plugged and abandoned, regulating geothermal wells and offshore drilling, and ordering the re-abandonment of any well that is considered hazardous or poses a danger to health, the environment or natural resources.

Waste Classification Criteria

In accordance with CCR Title 22 Section 66261.20, et seq., excavated soil would be classified as a hazardous waste if it exhibits the characteristics of ignitability, corrosivity, reactivity, or toxicity.

A waste is considered hazardous by state and federal regulations if the soluble concentration exceeds the federal regulatory level as determined by the toxicity characteristic leaching procedure (TCLP). A waste is considered hazardous under state regulations if the soluble contaminant concentration exceeds the soluble threshold limit concentration (STLC). A waste may also be classified as toxic if testing indicates toxicity greater than the specified criteria.

Hazardous Materials Worker Safety Requirements

The state regulations concerning the use of hazardous materials in the workplace are included in CCR Title 8, and include requirements for safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA standards are generally more stringent than federal OSHA regulations. Cal/OSHA also enforces hazard communication program regulations, which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information relating to hazardous substances and their handling, and preparation of health and safety plans to protect workers. CCR Title 8, Subchapter 4. Construction Safety Orders, Article 36. Fire Protection and Prevention, establishes limits on storage of fuels at construction sites. A maximum of 660 gallons of fuel or other flammable materials can be stored in approved portable tanks. Cal/OSHA also establishes permissible exposure limits for hazardous materials that may be encountered in the work place.

California Accidental Release Program

California Health and Safety Code (CHSC) Section 25531 and the California Accidental Release Program (CalARP) regulate the registration and handling of regulated substances. CalARP

incorporates the requirements of the federal Risk Management Plan rule but is more stringent with respect to the threshold quantities of chemicals requiring Risk Management Plans and includes more chemicals than the federal program. Regulated substances are any chemicals designated as an extremely hazardous substance by the USEPA as part of its implementation of SARA Title III or by the State of California pursuant to CHSC Section 25532. The requirements of CHSC Section 25531 overlap or duplicate some of the requirements of SARA and the Federal Clean Air Act. Facilities handling or storing regulated substances at or above Threshold Planning Quantities must register in the California Environmental Reporting System, and prepare a Risk Management Plan. CalARP is found in CCR Title 19 Chapter 4.5. The Risk Management Plan is implemented by the business to prevent or mitigate releases of regulated substances that could have off-site consequences through hazard identification, planning, source reduction, maintenance, training, and engineering controls.

Local Policies and Regulations

Stanislaus County General Plan

The Stanislaus County General Plan (Stanislaus County 2016) guides development for the County with a 20-year planning horizon. The following policy in the Stanislaus County General Plan, Safety Element would apply to the project:

Policy Thirteen: The Department of Environmental Resources shall continue to coordinate efforts to identify locations of hazardous materials and prepare and implement plans for management of spilled hazardous materials as required.

Stanislaus County Hazardous Materials Business Plan

As required under Chapter 6.95 of the California State Health and Safety Code, businesses that use, handle, or store a hazardous material or an extremely hazardous material over specified limits are required to submit Hazardous Materials Business Plans to Stanislaus County (Stanislaus County 2019). These limits include quantities greater than or equal to 500 pounds of a solid substance, 55 gallons of a liquid, 200 cubic feet of compressed gas, and hazardous waste in any quantity. Business Plans contain information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of within the County.

The Hazardous Materials Division of the Department of Environmental Resources at Stanislaus County performs routine inspections at businesses required to submit Business Plans to ensure compliance with existing laws and regulations, to identify existing safety hazards, and to suggest preventative measures.

The Hazardous Materials Business Plan must be recertified every year by reviewing the information currently in the California Environmental Reporting System and submitting each element of the Hazardous Materials Business Plan (Stanislaus County 2019). Business Plan information must be amended in the California Environmental Reporting System within 30 days if there is any increase in quantity of a hazardous material at the business, if there is any handling of a previously undisclosed hazardous material, if there is any change in the storage, location or use of hazardous materials, or if there is any change to the business details, including a change in the site map.

Stanislaus County Department of Environmental Resources Hazardous Materials Division

Under California Health and Safety Codes 101325, 25404.1.1 and 13801, Stanislaus County requires the acquisition of a permit for any monitoring well construction borings.

City of Patterson General Plan

The City of Patterson General Plan (City of Patterson 2010) set a vision for a “vibrant, economically sound and culturally diverse community as the ‘capital’ of western Stanislaus County”. The following goal and policies in the City of Patterson General Plan, Health and Safety Element would apply to the project:

Goal HS-7: To protect the health and safety of Patterson residents from the harmful effects of the use, transport, and disposal of hazardous substances.

Policy HS-7.3: Management of hazardous materials. The City shall regulate the storage of hazardous and waste materials consistent with state and federal law. The City shall not permit above ground tanks without considering the potential hazards that would result from the release of stored liquids caused by possible rupture or collapse and may request applicants to have an emergency response plan.

Policy HS-7.4: Industrial Facilities. The City shall work with responsible agencies to ensure that all industrial facilities are constructed and operated in accordance with the most current safety and environmental protection standards.

Hydrology

Federal Policies and Regulations

Clean Water Act

Originally titled the Federal Water Pollution Control Act of 1972, the Clean Water Act (CWA) is administered by USEPA. The CWA allowed USEPA to delegate the National Pollutant Discharge Elimination System (NPDES) Permit Program to state governments, enabling states to perform many of the permitting, administrative, and enforcement aspects of the NPDES Program. In California, these functions are performed by the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs). The CWA serves as the primary federal law protecting the quality of the nation’s surface waters, including lakes, rivers, and coastal wetlands. The Central Valley Regional Water Quality Control Board (CVRWQCB) has jurisdiction over the proposed project area.

Section 303(d)

CWA Section 303(d) requires states to develop lists of water bodies that will not attain water quality standards after implementation of technology-based effluent limitations by point-source dischargers. Section 303(d) further requires states to develop a Total Maximum Daily Load (TMDL) for each of the listed pollutants and water bodies. A TMDL is the amount of pollutant loading that the water body can receive and still meet water quality standards.

In 2016, the USEPA gave final approval to a revised list of impaired water bodies (hereinafter referred to as the 303(d) list) prepared by the State. Del Puerto Creek, between the DMC and confluence with the San Joaquin River, is listed for several constituents, specified below. The San Joaquin River is listed for several constituents and TMDLs have been approved for some constituents including specific organic pesticides, salt, chlorpyrifos, and boron (SWRCB 2010). The DMC is not on the 303(d) list.

The SWRCB and RWQCBs assesses water quality data for California’s surface waters every two years to determine if they contain pollutants at levels that exceed protective water quality criteria. The biennial assessment is required under Section 303(d) of the CWA.

Del Puerto Creek, as it flows through the proposed Project area, is not listed on the 303(d) list. Del Puerto Creek, between the DMC and San Joaquin River, is listed on the 303(d) list for the following pollutants:

- Bifenthrin
- Chlorpyrifos
- Cyfluthrin
- Cyhalothrin, Lambda
- Diazinon
- Dieldrin
- Diuron
- Esfenvalerate/Fenvalerate
- Indicator Bacteria
- Nitrate + Nitrite (as N)
- pH (high)
- Pyrethroids
- Salinity
- Total Dissolved Solids (TDS)
- Toxicity

TMDLs have not been established for the above 303(d)-listed pollutants (SWRCB 303(d) List, 2014-2016).

Section 401

Section 401 of the CWA allows for evaluation of water quality when a proposed activity requiring a federal license or permit could result in a discharge to waters of the U.S. Compliance with Section 401 is required for all projects that have a federal component and may affect water quality. See *Chapter 3.4, Biological Resources* for further discussion of CWA Section 401.

Section 402

Section 402 of the CWA specifically required USEPA to develop and implement the NPDES program. In California, USEPA authorizes the SWRCB to oversee the NPDES program through the RWQCBs. There are several types of NPDES permits relevant to the proposed project.

General Permit for Discharges of Storm Water Associated with Construction Activity

In 2009, the SWRCB adopted an amended *General Permit for Discharges of Storm Water Associated with Construction Activity*, NPDES Order No. CAS000002, Order No. 2009-0009-DWQ (Construction General Permit). Effective July 1, 2010, the amended General Construction Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and monitoring program for construction projects that result in one or more acres of land disturbance. The SWPPP must identify Best Management Practices (BMPs) that will be implemented during construction to control pollutants in stormwater discharges from the construction site; a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment (Note: The San Joaquin River is not 303(d) listed for sediment.). Because the proposed project would disturb more than one acre, coverage under the

General Construction Permit would be required and one or more SWPPPs would be developed and implemented for the various components of the project.

Waste Discharge Requirements for Dewatering and Other Low Threat Discharges to Surface Waters

On May 31, 2013, the CVRWQCB adopted *Waste Discharge Requirements for Dewatering and Other Low Threat Discharges to Surface Waters*, Order R5-2013-0074 NDPES No. CAG995001 (General Order for Dewatering). Individuals, public agencies, private businesses, and other legal entities discharging relatively pollutant-free wastewaters that pose little or no threat to the quality of surface waters, for a duration of either four months or less in duration or have an average dry weather flow less than 0.25 million gallons per day (mgd), may obtain authorization under this General Order to discharge. This General Order covers certain categories of dewatering and other low threat discharges to waters of the United States, which are either four months or less in duration or have a daily average discharge flow that does not exceed 0.25 mgd. It is expected that dewatering would not exceed 0.25 mgd and that the proposed project would be eligible for coverage under the General Order. If dewatering were to exceed 0.25 mgd, an alternative NPDES permit would be needed in order to discharge water from dewatering operations. This same permit would be expected to cover discharges that would be required for hydrostatic testing of the pipeline at the completion of construction.

Section 404

CWA Section 404 regulates the discharge of dredged and fill materials into waters of the United States. Areas meeting the regulatory definition of waters of the U.S. are subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under provisions of CWA Section 404. Construction activities involving placement of fill into jurisdictional waters of the U.S. are regulated by the USACE through Section 404 permits. No USACE permit is effective in the absence of state water quality certification pursuant to Section 401 of the CWA. Also, see *Chapter 3.4, Biological Resources* for further discussion of CWA Section 404.

National Flood Insurance Program

NFIP was created to promote flood awareness and reduce flood losses of properties within Special Flood Hazard Areas. Drainage and related flooding hazards are managed in response to requirements established by the National Flood Insurance Act of 1986 and the Flood Disaster Protection Act of 1973, as amended. Requirements of the NFIP are included in the Building Code and through overall City and interagency programs for flood management. In implementing NFIP, FEMA requires that new construction in a flood hazard area meet minimum design standards to place occupied structures above flood hazard areas. FEMA publishes flood inundation maps indicating areas prone to a 100-year flood event, and portions of the City of Patterson and surrounding areas are in the current 100-year inundation area from floods on Del Puerto Creek.

Reclamation Guidelines for Accepting Non-Project Water into the DMC

In the *Delta-Mendota Canal Non-Project Water Pump-in Program Monitoring Plan* (USBR 2018), Reclamation has established guidelines for accepting non-project water in the DMC. Specifically, such water must meet water quality standards before introduction to the canal; (i.e., dilution in the canal is not considered in determining whether non-project water meets water quality standards), and non-project water must not cause alterations of existing water quality parameters outside of standards established by the guidelines. The current water quality standards for non-project surface water are based on statewide domestic water quality regulations and are listed in the January 2018 Monitoring Plan. Similar to the 2014 Monitoring Plan, the 2018 monitoring plan will measure changes in the quality of water

in the DMC caused by the introduction of the non-project surface water and confirm that the blended water is suitable for downstream water users.

Coordinated Operation Agreement

The Coordinated Operation Agreement (COA), signed in 1986, is an agreement between the State of California (represented by the Department of Water Resources (DWR) and the federal government (represented by Reclamation). The purpose of the COA is to coordinate the operations of the CVP and the SWP. The COA defines each project's responsibility to protect other beneficial uses of water and defines the sharing of excess water between the projects.

The procedure for sharing responsibility for demands and for sharing excesses of water is defined under two conditions: balanced water conditions and excess water conditions. Balanced water conditions occur when upstream releases plus unregulated flows equal the water supply needed to meet in-basin uses plus CVP and SWP Delta diversions, which include withdrawals under CVP and SWP water right permits at the Jones (formerly Tracy) Pumping Plant, the Banks Pumping Plant, the Contra Costa Canal Pumping Plant #1, and the North Bay Aqueduct. Excess water conditions occur when upstream releases plus unregulated flows exceed the water supply needed to meet in-basin uses plus SWP and CVP Delta diversion.

The COA stipulates that the CVP and SWP will coordinate responsibility for meeting Sacramento Valley in-basin use and for sharing any un-stored water for export. When stored water is needed for in-basin use then the CVP agrees to provide 75 percent of the water necessary to meet the standard while the SWP provides the remaining 25 percent. If un-stored water is available for export, then the CVP is entitled to use 55 percent of the excess available water and the SWP is entitled to the remaining 45 percent. Any water that is not used by one project is available for use by the other project, or it flows out of the Delta as surplus. These rules were established to account for meeting SWRCB Decision 1485. Subsequent changes to the Water Quality Control Plan have resulted in modifications to these rules by mutual agreement between Reclamation and DWR.

In December 2018 Reclamation and DWR agreed to amend four elements of the COA to reflect how the CVP and SWP have evolved since the original COA was authorized (Reclamation Addendum 2018). The four proposed changes to the COA are:

- 1) Sharing responsibility between Reclamation and DWR for meeting Sacramento Valley in-basin use with storage withdrawals during balanced water conditions
- 2) Adding that DWR will transport up to 195,000 AF of CVP water through the California Aqueduct no later than November 30 of each year at times those diversions do not adversely affect the SWP purposes or do not conflict with SWP contract provisions
- 3) Sharing export capacity between Reclamation and DWR when exports from the Delta are constrained
- 4) Prior to initiation of operation of a new or significantly modified Reclamation or DWR facility, Reclamation and DWR shall jointly review the operations of both projects.

Reclamation Water Contracts

The Project Partners receive water from the DMC through contracts with Reclamation. Del Puerto Water District purchases water from the Bureau of Reclamation pursuant to a water service contract. The member entities of the San Joaquin River Exchange Contractors Water Authority are party to two contracts with the United States: a Purchase Contract and an Exchange Contract. Under the Purchase Contract, the Exchange Contractors sold their so called "High Flow" San Joaquin River

water rights to the United States, except for ‘reserved water,’ water to which the Exchange Contractors hold vested rights. Simultaneously, under the Exchange Contract, the Exchange Contractors agreed not to exercise their rights to the San Joaquin River, so long as they receive certain volumes of substitute water. The Exchange Contract contemplates that most if not all of the substitute water provided to the Exchange Contractors will be delivered to them via the Delta - Mendota Canal. Contracted water amounts determine quantities of supply that DPWD receives each year from Reclamation. Actual deliveries to DPWD have been as low as zero in two years during the most recent drought. (Hansen 2019). The Exchange Contractors have a contractual water allotment of up to 840,000 AF, but in critical years the allocation is reduced to 75 percent, or 650,000 AF (USBR 1967, USBR 1939). However, during critical years the Exchange Contractors supply was reduced to 75 percent in 1991, 1992, and 1994, and down to 61 percent in 2014, and 54 percent in 2015. The Project Partners and their contract water amounts are provided in **Table 3.115**.

Table 3.11-5: DPCR Project Partners Contract Water Amounts

Project Partner	Contract Water Amount (AFY)
Del Puerto Water District	140,210
Central California Irrigation District	840,000 ¹
San Luis Canal Company	
Firebaugh Canal Water District	
Columbia Canal Company	

¹ Central Valley Project Water Contractors, March 30, 2016.

State Policies and Regulations

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act is California’s statutory authority for the protection of water quality. Under this act, the State must adopt water quality policies, plans, and objectives that protect the State’s waters. The act sets forth the obligations of the SWRCB and RWQCBs pertaining to the adoption of Basin Plans and establishment of water quality objectives. Unlike the federal CWA, which regulates only surface water, the Porter-Cologne Act regulates both surface water and groundwater.

The Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and the San Joaquin River Basin (CVRWQCB 2011) is designed to preserve and enhance water quality and protect the beneficial uses of all waters within the region. Specifically, the Basin Plan:

1. Designates beneficial uses for surface and groundwaters;
2. Sets narrative and numerical water quality objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy;
3. Describes implementation programs to protect the beneficial uses of all waters in the Region; and

4. Describes surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan [California Water Code Sections 13240 thru 13244, Section 13050(j)].

The Basin Plan is used as the regulatory authority for water quality standards established in local NPDES permits and other CVRWQCB decisions. The Basin Plan designates beneficial uses and water quality objectives for the San Joaquin River, the DMC and San Luis Reservoir.

Division of Safety of Dams (DSOD)

DSOD dam safety guidelines include criteria for the emergency evacuation of a reservoir and design of related facilities, such as the emergency spillway and outlet structure, required to evacuate flows. The proposed project is subject to DSOD design standards and criteria for operation. See *Section 3.8.2, Regulatory Framework*, in the *Geology Section* for additional description of design requirements of the DSOD.

California Water Code 6160 - 6162-Emergency Action Plans

Senate Bill (SB) 92, signed into law June 27, 2017, requires an emergency action plan (EAP) for all jurisdictional dams that do not have a low downstream hazard potential, as determined by the DWR Division of Safety of Dams. Jurisdictional dams are those more than 6 feet high or impounds more than 50 acre-feet of water. The project would be a jurisdictional dam and would require an emergency action plan as required by California Water Code Sections 6160 through 6162. The Division of Safety of Dams provides a thorough review of each dam proposal and provides specific requirements for design, monitoring and an emergency action plan for each dam proposal.

State Water Rights

California's system of water rights is referred to as a "dual system" in which both the riparian doctrine and the prior appropriation doctrine apply. Riparian rights result from the ownership of land bordering a surface water source (a stream, lake, or pond). These rights normally are senior in priority to most appropriative rights, and riparian landowners may use natural flows directly for beneficial purposes on riparian lands without a permit from the SWRCB.

Appropriative rights are acquired by diverting surface water and applying it to a beneficial use. Before 1914, appropriative rights could be obtained by simply diverting and using the water, posting a notice of appropriation at the point of diversion, or recording a copy of the notice of appropriation with the county recorder. Since 1914, the acquisition of an appropriative right also requires a permit from the SWRCB.

The SWRCB is responsible for overseeing the water rights and water quality functions of the state. The SWRCB has jurisdiction to issue permits and licenses for appropriation from surface water and subterranean streams flowing through known and definite channels. The California courts have jurisdiction over the use of percolating ground water, riparian use of surface waters, and the appropriative use of surface waters from diversions begun before 1914.

The Project Partners will file a water right for any flows diverted from Del Puerto Creek to storage and/or subsequent use. Reclamation would need to add a point of redirection to storage in the new reservoir to Reclamation's existing Central Valley Project water rights in the Trinity, Sacramento, and American Rivers.

Streambed Alteration Agreement Program

Under Sections 1600–1616 of the California Fish and Game Code, any person, business, state or local government agency, or public utility that proposes an activity that would (1) substantially divert or

obstruct the natural flow, (2) substantially change use of any material from the bed, channel, or bank of any river, stream, or lake, or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake, is required to notify the California Department of Fish and Wildlife (CDFW).

After such notification, the Streambed Alteration Agreement requires that the notifying entity and CDFW identify potential impacts of construction and mitigation measures required to minimize and avoid impacts. All portions of the project that would alter a waterway, including the reservoir expansion, would be subject to the Streambed Alteration Agreement Program. See *Chapter 3.4, Biological Resources* for further discussion of the CDFW Streambed Alteration Program.

Local Policies and Regulations

The discussion of existing policies and regulations focuses on Stanislaus County and the City of Patterson, the two jurisdictions where construction would occur.

Stanislaus County General Plan

The Stanislaus County General Plan guides development for the County with a 20-year planning horizon. The following goals/policies in the Stanislaus County General Plan, Conservation/Open Space Element would apply to the project:

GOAL TWO: Conserve water resources and protect water quality in the County.

Policy Five: Protect groundwater aquifers and recharge areas, particularly those critical for the replenishment of reservoirs and aquifers.

Policy Six: Preserve vegetation to protect waterways from bank erosion and siltation.

Policy Eight: The County shall support efforts to develop and implement water management strategies.

Policy Nine: The County will investigate additional sources of water for domestic use.

City of Patterson General Plan

Goal PS-1: To maintain an adequate level of service in the City's water system to meet the needs of existing and future development.

Policy PS-1.1 Water Supply. The City shall continue to use groundwater as a source of domestic water for the city. The City shall also pursue, as expeditiously as possible, a water supply program consisting of the development of multiple sources of water, the maximum use of recycled water, water conservation and groundwater management to accommodate projected water demand and provide for water supply security.

Land Use and Recreation

Local Policies and Regulations

Most project facilities would be located within the jurisdiction of Stanislaus County. Portions of the conveyance facility alignment would be located within the City of Patterson city limits. Policies for Stanislaus County and the City of Patterson are presented below.

Stanislaus County General Plan

The Stanislaus County General Plan (Stanislaus County 2016) regulates land use and development in unincorporated areas of Stanislaus County and outlines goals and policies to guide zoning and land use decisions. The following policies in the land use element of the Stanislaus County General Plan are relevant to the proposed project:

GOAL ONE: Provide for diverse land use needs by designating patterns which are responsive to the physical characteristics of the land as well as to environmental, economic, and social concerns of the residents of Stanislaus County.

Policy Two: Land designated Agriculture shall be restricted to uses that are compatible with agricultural practices, including natural resources management, open space, outdoor recreation and enjoyment of scenic beauty.

Policy Seven: Riparian habitat along the rivers and natural waterways of Stanislaus County shall, to the extent possible, be protected.

Implementation Measure One: All requests for development which require discretionary approval and include lands adjacent to or within riparian habitat shall include measures for protecting that habitat to the extent that such protection does not pose threats to proposed site uses, such as airports.

GOAL TWO: Ensure compatibility between land uses.

Policy Fourteen: Uses shall not be permitted to intrude into or be located adjacent to an agricultural area if they are detrimental to continued agricultural usage of the surrounding area.

GOAL THREE: Foster stable economic growth through appropriate land use policies.

Policy Seventeen: Agriculture, as the primary industry of the County, shall be promoted and protected.

Policy Eighteen: Promote diversification and growth of the local economy

Implementation Measure Seven: Strengthen the agricultural sector of the economy by continuing to implement the strategies for agriculture-related economic development identified under Goal One of the Agricultural Element.

Additionally, the following policies in the Conservation/Open Space Element of the Stanislaus County General Plan would apply to the proposed project:

GOAL FOUR: Provide for the open-space recreational needs of the residents of the County.

Policy Thirteen: Promote the use of water reservoirs for multiple recreational purposes, where appropriate.

Implementation Measure One: The County shall encourage the multiple uses of reservoirs as flood control devices, recreational facilities, and wildlife habitats.

Stanislaus County Zoning Code

The Stanislaus County Zoning Code is designed to promote and protect the public health, safety, peace, morals, comfort, convenience, and general welfare of those living and working within Stanislaus County. The zoning code provides a general plan of development for the county, and serves to guide, control and regulate the future growth of the county in accordance with the general plan. The project area is zoned as *General Agriculture District (A-2)*; that is, the project area is designed to support and enhance agriculture as the predominant land use. Uses and policies regarding the General Agriculture

District are intended to protect open space lands and ensure that all land uses are compatible with agriculture and open space, including natural resources management (Stanislaus County 2017).

The zoning code also includes specific guidance regarding Williamson Act contract lands. A discussion of the proposed project's consistency with existing zoning for agricultural use, or a Williamson Act contract, is included in *Section 3-2, Agricultural and Forestry Resources*.

City of Patterson General Plan and Zoning Code

The City of Patterson General Plan (2010) is a comprehensive, long-term plan which guides development and land use within the city and within certain areas adjacent to the city (the *general plan area*) (**Figure 3.12-2**). Within the general plan area, the city has designated “expansion areas” for additional development. The project area would include two of these expansion areas: the Canals Expansion Area (designated for commercial and light industrial development) and Foothills Expansion Area (designated for mixed-use hillside and highway service commercial development). The city's General Plan includes a brief, general overview of the issues to be addressed in the development of these areas in the future (e.g., visual and circulation impacts), but does not include detailed plans for these areas.

The following policies in the land use element of the City of Patterson General Plan are relevant to the proposed project:

GOAL LU-3: To designate adequate land and provide support for the development of commercial uses providing goods and services to Patterson residents and to become the commercial service hub for western Stanislaus County.

GOAL LU-5: To designate sufficient land to accommodate land uses serving the traveling public.

Policy LU-5.1: Highway Commercial development. The City shall support the development of highway-serving commercial area near the Sperry Avenue/Interstate 5 interchange and near a future interchange in the vicinity of Zacharias Road.

GOAL LU-7: To designate adequate land and provide support for light and heavy industrial uses that create jobs and enhance the economy of Patterson.

The City of Patterson Zoning Code establishes zoning districts that determine allowable land uses within the city boundaries (City of Patterson 2017). The portion of the project area that is within the city is zoned as West Patterson light industrial (City of Patterson 2014). This designation is generally consistent with the city's light industrial designation (with minor exceptions that would not apply to the proposed project) (City of Patterson 2017). The city's general plan map also makes zoning determinations for areas that are within the general plan area. The portions of the project area that are outside the city limits but within the general plan area are zoned for mixed use, highway service commercial, general commercial, and light industrial uses. The zoning designations that are applicable within the project area are described below:

General commercial: The general commercial land use type provides for land-extensive retail and wholesale commercial uses, offices, public and quasi-public uses, and similar and compatible uses. The purpose of the general commercial district is to stabilize, improve, and protect the characteristics of commercial businesses and to provide adequate locations for stores, shops, and offices which are supplying commodities or performing services for residents of the city as a whole. Public utility structures are not permitted in general commercial areas; electrical substations are allowed with a conditional use permit.

Light industrial (including West Patterson light industrial): The light industrial designation provides locations for the development of industrial parks, warehouses, light manufacturing, public and quasi-public uses, and similar and compatible uses. Public utility structures are permitted in light industrial areas; electrical substations are allowed with a conditional use permit.

Mixed use: The purpose of the mixed-use overlay district is to provide special flexibility within areas zoned for commercial or office development to allow for the addition of residential development. For a General Commercial area with mixed use overlay the permitted uses are defined by the General Commercial designation.

Highway service commercial: The highway service commercial land use designation is applied to locations along highways and is intended to provide businesses and services to meet the needs of the traveling public. Under this zoning designation, public utility structures are not permitted; electrical substations are allowed with a conditional use permit.

Traffic and Transportation

Federal Policies and Regulations

Federal Highway Administration Manual on Uniform Traffic Control Devices

The Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices is a compilation of national standards for all traffic control devices, including road markings, highway signs, and traffic signals. This document, which has been administered by FHWA since 1971, is updated periodically to accommodate the nation's evolving transportation needs and addresses new safety technologies, traffic control tools and traffic management techniques. The most current version of the manual is dated 2009 and was published in the Federal Register on June 13, 2012 (FHWA 2012).

State Policies and Regulations

California Manual on Uniform Traffic Control Devices

Caltrans has modified the FHWA's Manual on Uniform Traffic Control Devices for use in California. Effective March 29, 2019, the latest version of the manual is Revision 4 (Caltrans 2019). The manual provides uniform standards and specifications for all official traffic control devices in California. These standards are the relevant adopted regulatory standards in the State of California for use on public roadways.

Caltrans Transportation Management Plan Guidelines

California Department of Transportation (Caltrans) Transportation Management Plan Guidelines (Caltrans 2009) outline strategies and guidelines that are needed to minimize traffic congestion during road work activities that are planned along existing Caltrans facilities. The guidelines established in this document identify processes, roles, and responsibilities for all planned construction, maintenance, and permit activities. Incorporation of these strategies in project construction documents and implementation of the strategies are expected to help reduce congestion and manage traffic impacts near work areas.

Local Policies and Regulations

Stanislaus County General Plan

The Circulation Element of the Stanislaus County General Plan (Stanislaus County 2016) contains the following relevant policies and implementation measures:

GOAL ONE: Provide and maintain a transportation system throughout the County for the movement of people and goods that also meets land use and safety needs for all modes of transportation.

Policy Two: The Circulation system shall be designed and maintained to promote safety by combining multiple modes of transportation into a single, cohesive system.

Implementation Measure One: The County shall maintain LOS D or better for all County roadways (Daily LOS) and LOS C or better at intersections (Peak Hour LOS), except, within the sphere of influence of a city that has adopted a lower level of service standard, the City standard shall apply. The County may allow either a higher or lower level of service standard for roadways and intersections within urban areas such as Community Plan areas, but in no case shall the adopted LOS fall below LOS D.

Implementation Measure Seven: Within the spheres of influence of any city, roadway improvements, dedications, building setbacks and road reservations shall meet the development standards of the city consistent with the Spheres of Influence Policy in the Land Use Element of the General Plan, except in those areas subject to an individual city/county agreement. These requirements may change from time-to-time through the adoption or revision of local land use plans or standards. To ensure consistency with a city's development standards, additional right-of-way may be required to meet the standards of that city. Where design and access requirements of a city differ from those established by the County, development shall be required to meet the standards of the city. The County will consult with the city prior to the construction of transportation improvements within the sphere of influence to ensure consistency with the standards of that city.

Implementation Measure Ten: Traffic control devices (e.g., traffic signals, roundabouts), traffic calming, and other transportation system management techniques shall be utilized to control the flow of traffic, improve traffic safety, and minimize delays.

Policy Five: Transportation requirements shall be considered during planning, design and construction of commercial and industrial development to address safety, mobility, and accessibility needs.

Policy Seven: Bikeways and pedestrian facilities shall be designed to provide safe and reasonable access from residential areas to major bicycle and pedestrian traffic destinations such as schools, recreation and transportation facilities, centers of employment, and shopping areas.

Implementation Measure Five: To safely accommodate bicycle traffic, adequate pavement shoulder and/or striping shall be planned and implemented when constructing new roadways or implementing major rehabilitation projects in accordance with the County Standards and Specifications, the Caltrans Highway Design Manual, or other nationally recognized standard.

Policy Eight: Promote public transit as a viable transportation choice.

GOAL TWO: Maintain a balanced and efficient transportation system that facilitates inter-city and interregional travel and goods movement.

Policy Nine: The County shall promote the development of safe inter-city and interregional transportation facilities that more efficiently moves goods and freight within and through the region.

Utilities and Service Systems

Federal Policies and Regulations

Federal Power Act

The Federal Power Act established the Federal Energy Regulatory Commission (FERC) as an independent agency to regulate the interstate transmission of electricity, natural gas, and oil. FERC additionally reviews proposals to build liquefied natural gas terminals and interstate natural gas pipelines as well as licensing hydropower projects. The Federal Power Act was amended with the Energy Policy Act of 2005 to include reliability standards following a massive power outage in 2003 that affected 55 million people in the United States and Canada (United States Code §§ 792 et seq., amended 2005). The Energy Policy Act of 2005 expanded FERC's responsibilities to include protecting the reliability of the high voltage interstate transmission system through mandatory reliability standards, ensuring the safe operation and reliability of proposed and operating liquefied natural gas terminals, and regulating the transportation of oil by pipeline in interstate commerce (FERC 2006).

North American Electric Reliability Corporation Reliability Standards

The North American Electric Reliability Corporation (NERC) is an electric reliability organization certified by FERC to establish and enforce reliability standards for the Bulk Power System.³ NERC provides oversight for many reliability standards including resource and demands balancing; critical infrastructure protection; emergency preparedness and operations; facilities design, connections, and maintenance; interchange scheduling and coordination; interconnection reliability operations and coordination; modeling, data, and analysis; personnel performance, training, and qualifications; protection and control; transmission operations; and transmission planning (NERC 2019b).

State Policies and Regulations

California Public Utilities Commission

The CPUC regulates services and utilities to protect consumers, safeguard the environment, and assure access to safe and reliable utility infrastructure and services. The essential services regulated include electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CPUC's energy work responsibilities are derived from the California State Constitution, Article XII, Section 3 and other sections more generally, as well as state legislative enactments and federal statutory and administrative requirements (CPUC 2019). The CPUC establishes general orders, standards, procedures, and guidelines, including General Order 95: Rules for Overhead Electric Line Construction (Decision No. 18-05-042), which provides detailed construction requirements for electric supply lines, towers, and extra-high voltage lines (CPUC 2018).

Local Policies and Regulations

City of Patterson General Plan

GOAL PS-1: To maintain an adequate level of service in the City's water system to meet the needs of existing and future development.

³ The bulk power system refers to facilities and control systems necessary for operating an interconnected electric energy supply and transmission network (or any portion thereof), and electric energy from generating facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy (NERC 2019a).

Policy PS-1.4 Agency coordination. The City shall coordinate, to the extent feasible, with other agencies involved in water resource development in the region.

Socioeconomics

Local Policies and Regulations

Many of the county plans have goals related to sustaining the agricultural industry of the area. The Stanislaus County General Plan has a goal of strengthening the agricultural sector of the economy. The San Joaquin County General Plan has a water resource objective to ensure adequate quantity and quality of water resources for municipal and industrial uses, agriculture, recreation, and fish and wildlife. The Merced County General plan has a goal to maintain the financial viability of the agricultural sector by encouraging the expansion of commercial agriculture, attracting new agricultural support and value-added industries, and promoting locally-grown commodity.

**Appendix F Del Puerto Canyon Reservoir Project EIS Air Quality and General
Conformity Rule Analysis**

Draft

**General Conformity Rule Analysis and
Determination**

Del Puerto Canyon Reservoir Project

July 14, 2025

Prepared by US Bureau of Reclamation

with assistance from Woodard & Curran

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1 Introduction

Air quality was evaluated by reviewing the federal National Ambient Air Quality Standards (NAAQS) and conformity guidelines, emission information from local monitoring stations, existing studies and analyses, and by evaluating data and modeling applicable to the Project Area. The region of influence includes the area shown in the **Del Puerto Canyon Reservoir Environmental Impact Statement Figure 1, Location Map**. However, given the dispersive nature of air pollutants, the region of influence for air quality is the San Joaquin Valley Air Basin, which is under jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

The General Conformity regulations at Title 40 Code of Federal Regulations (CFR) Subchapter C Part 93 ensure that the actions taken by federal agencies do not interfere with a state's plans to attain and maintain national standards for air quality. This General Conformity Rule Analysis documents how the Project will meet the requirements of the General Conformity regulations. This General Conformity Rule analysis includes an evaluation of site-specific emissions, a statement on General Conformity Rule applicability to the Project, the Responsible Agency's mitigation commitments, and a statement on agency reporting and public review.

This document pertains only to the federal General Conformity regulations. Applicable state and municipal air quality regulations are discussed in the Del Puerto Canyon Reservoir Environmental Impact Report (published October 2020).

Project Purpose and Description

Reclamation has identified the Project purpose as providing offstream surface water storage south of the Delta to improve water supply reliability within the Del Puerto Water District (DPWD) and San Joaquin River Exchange Contractors Water Authority (SJRECWA) service areas in a manner that is consistent with Water Infrastructure Improvements for the Nation (WIIN) Act requirements and Reclamation law. Due to natural conditions in California, the amount of water available for Central Valley Project (CVP) users south of the Sacramento-San Joaquin Delta (Delta) can be extremely variable year-to-year which often result in south-of-Delta Contractors receiving less than their contracted CVP water allocations due to limitations on the amount of available water. Project benefits include agricultural water supply reliability, municipal and industrial (M&I) water supply to the City of Patterson from creek flow re-regulation, storage capacity for south-of-Delta drought improvement program, Delta-Mendota Canal (DMC) capacity constraint water, increased refuge water supply reliability, and flood damage reduction.

The need for the Project is driven by DPWD and SJRECWA's need to improve agricultural and M&I water supply reliability within the DPWD and SJRECWA service areas. Increasing water supply reliability will reduce economic hardships on water users by reducing land fallowing and subsequent crop damage and losses, and decreasing the need to purchase water at high costs. Increased water supply reliability will also reduce groundwater overdraft and subsidence by reducing reliance on groundwater pumping in dry and critically dry years.

The project would entail construction and operation of a reservoir to provide approximately 82 thousand acre-feet (TAF) of new off-stream storage on Del Puerto Creek in the Coast Range west of Patterson, California. Project components include the reservoir (a main dam, two saddle dams, and other facilities), conveyance facilities to transport water to/from the DMC (including a pipeline and

pumping plant), electrical facilities, relocation of a portion of Del Puerto Canyon Road, and relocation of existing and proposed utilities that are within the project area. Water would be pumped from the DMC to the proposed reservoir through new conveyance infrastructure. Existing utilities that pass through the project area would be relocated to avoid the inundation and dam area, as would a portion of the existing Del Puerto Canyon Road.

Existing Conditions and Regulatory Background

This section summarizes the existing air quality for the region of influence, including the National Ambient Air Quality Standards (NAAQS), attainment status, and federal general conformity. The U.S. Environmental Protection Agency (EPA) is responsible for establishing NAAQS and enforcing the Federal Clean Air Act in an effort to protect human health and public welfare. **Table 1** provides the federal NAAQS. EPA calls these pollutants “criteria” air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health is called primary standards. Another set of limits intended to prevent environmental and property damage is called secondary standards. Geographic areas are deemed to be in “attainment” if these standards are met or “non-attainment” if they are not met. Nonattainment and maintenance areas have a unique geography for each pollutant based on the physical region of the nonattainment area, and the meteorology, sources, and mechanisms that contribute to violations of the NAAQS. Nonattainment status is classified by the severity of the nonattainment problem, with marginal, moderate, serious, severe, and extreme nonattainment classifications for ozone. Nonattainment classifications for particulate matter range from marginal to serious. **Table 1** shows the status of attaining the federal primary standards. Ozone and particulate matter are the main pollutants of concern in the air basin.

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP. The SIP is not a single document but a compilation of new and previously submitted attainment plans, maintenance plans, emissions reduction programs, district rules, state regulations, and federal controls. Areas that previously exceeded a national air quality standard, but have come into compliance, are referred to as maintenance areas. When an area is redesignated maintenance status, the area is required to operate under a maintenance plan which establishes emission reduction measures that will ensure continued compliance with the NAAQS. The maintenance planning period extends for 20 years (two 10-year periods) after the redesignation date (42 U.S.C. Title 42 Chapter 85 subchapter I part D subpart 1 Section 75051 – Maintenance Plans). Once the 20-year maintenance planning period is over, the Clean Air Act General Conformity Rule no longer applies, and the area is considered to be in attainment, although the timeframe could extend in a SIP revision (EPA 2025a).

The SJVAPCD has prepared SIP documents for PM_{2.5} (for the 2012 federal PM_{2.5} standard of 12.0 mg/m³) and ozone (SJVAPCD 2024a and SJVAPCD 2024b). However, on March 6, 2024, EPA revised the primary annual PM_{2.5} standard by lowering the level from 12.0 mg/m³ to 9.0 mg/m³ and an updated PM_{2.5} plan will need to be prepared. Until then, the 2024 Plan for the 2012 Annual PM_{2.5} Standard is the relevant planning document. For ozone, the SJVAPCD’s 2022 Plan for the 2015 8-hour Ozone Standard is the relevant planning document. The Federal PM_{2.5} Nonattainment Area

(EPA 2015) and Federal Ozone Nonattainment Area (EPA 2025) of the San Joaquin Valley includes Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare, and a portion of Kern County.

The SJVAPCD also prepared SIP documents for PM₁₀ to demonstrate continued attainment of EPA's PM₁₀ standard. In November 2008, EPA approved the 2007 PM₁₀ Maintenance Plan. On May 17, 2017, the San Joaquin Valley PM₁₀ Maintenance Plan Update was submitted to the EPA; however, on January 20, 2023, the California Air Resources Board formally withdrew the SJVAPCD 2017 PM₁₀ Maintenance Plan from consideration for inclusion in the California SIP, rendering the 2007 PM₁₀ Maintenance Plan as the relevant planning document. The SJVAPCD is preparing a revised PM₁₀ maintenance plan, anticipated to be finalized in 2026, that will specify new emissions guidance for PM₁₀. The Federal PM₁₀ Maintenance Area (EPA 1990) of the San Joaquin Valley also encompasses Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare, and a portion of Kern County.

In 1991, EPA designated eleven areas in California as nonattainment of the federal 8-hour carbon monoxide (CO) standard. By 1995, all but one of the areas, the Los Angeles urbanized area, met the air quality tests for attainment. Effective June 1, 1998, EPA approved the 1996 CO Maintenance Plan as part of the California SIP, and redesignated the ten areas attainment. The 2004 CO Maintenance Plan Update (CARB 2004) showed how the maintenance areas would maintain the CO standard through 2018, the full 20-year planning period. Now that the 20-year planning period is complete, the Clean Air Act General Conformity Rule no longer applies, and the areas are considered to be in attainment.

TABLE 1: NATIONAL AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS FOR THE SAN JOAQUIN VALLEY AIR BASIN

Pollutant	Averaging Time	National Standards - Primary	National Primary Attainment Status	National Standards - Secondary
Ozone (O ₃)	8 Hour	0.070 ppm	Nonattainment/ Extreme ⁽¹⁾	Same as national primary standard
Respirable Particulate Matter (PM ₁₀)	24 Hour	150 µg/m ³	Attainment ⁽²⁾	Same as national primary standard
Fine Particulate Matter (PM _{2.5})	24 Hour	35 µg/m ³	Nonattainment/ Serious ⁽³⁾	Same as national primary standard
	Annual Average	9.0 µg/m ³	Nonattainment/ Serious ⁽⁴⁾	15 µg/m ³
Nitrogen Dioxide (NO ₂)	1 Hour	100 ppb	Attainment	n/a
	Annual Average	53 ppb	Attainment	Same as national primary standard
Carbon Monoxide (CO)	1 Hour	35 ppm	Attainment	n/a
	8 Hour	9 ppm	Attainment	n/a
Sulfur Dioxide (SO ₂)	1 Hour	75 ppb	Attainment	n/a
	Annual Average	n/a	Attainment	10 ppb
Lead (Pb)	3-month Average	0.15 µg/m ³	No Designation	Same as national primary standard

Sources: EPA 2008, EPA 2024b, EPA 2025b, SJVAPCD nd, SJVAPCD 2024.

Notes: Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

(1) Though the San Joaquin Valley Air Basin was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved reclassification to extreme nonattainment on May 5, 2010.

(2) In November 2008, EPA redesignated the San Joaquin Valley Air Basin as an attainment/ maintenance area for the PM₁₀ National Ambient Air Quality Standard (NAAQS) and approved the SJVAPCD 2007 PM₁₀ Maintenance Plan.

(3) EPA designated the San Joaquin Valley Air Basin as serious nonattainment in December 2021 for the 2012 federal PM_{2.5} standards. The SJVAPCD adopted the 2024 Plan for the 2012 Annual PM_{2.5} Standard on June 20, 2024.

(4) On March 6, 2024, EPA revised the primary annual PM_{2.5} standard by lowering the level from 12.0 mg/m³ to 9.0 mg/m³.

SJVAPCD and the California Air Resources Board (CARB) operate and maintain an expansive network of air monitoring sites throughout the San Joaquin Valley, along with additional sites operated by the National Park Service and tribal nations. In total, 38 air monitoring sites are currently in operation in the San Joaquin Valley. Over the most recent three-year period for which there are available data, 2021-2023, air monitoring data showed that the federal 8-hour ozone standard was exceeded up to 30 days per year and the federal 24-hour fine particulate matter standard was exceeded up to 15 days per year. Air monitoring statistics at the nearest monitoring station to the project area, Turlock-S Minaret Street station, are shown in **Table 2**.

TABLE 2: AIR MONITORING DATA FOR 2021-2023

Year	Ozone – number of days of federal exceedances (>0.070 ppm)	Particulate matter <2.5 microns – number of days of federal exceedances (>35 µg/m ³)
2021	30	15.2
2022	12	5.1
2023	16	3.0

Sources: CARB n.d.

The U.S. Congress adopted general conformity requirements as part of the CAA Amendments in 1990 and the EPA implemented those requirements in 1993 (Sec. 176 of the CAA (42 U.S.C. Section 7506) and 40 CFR Part 93, Subpart B). General Conformity requires that all federal actions be consistent with (i.e., conform to) the SIP as approved or promulgated by EPA. The purpose of the general conformity program is to ensure that actions taken by the federal government do not undermine state or local efforts to achieve and maintain the national ambient air quality standards. This is accomplished by requiring federal agencies to design and plan their activities to conform to the applicable SIP for EPA-designated nonattainment areas and redesignated attainment areas (i.e., maintenance areas). Before a federal action is taken, it must be evaluated for conformity with the SIP. All “reasonably foreseeable” emissions predicted to result from the action are taken into consideration. These include direct and indirect emissions and must be identified as to location and quantity. If it is found that the action would create emissions above *de minimis* threshold (minimum threshold for which a conformity determination must be performed) levels specified in EPA regulations (40 CFR Section 93.153(b)), or if the activity is considered “regionally significant” because its emissions exceed 10 percent of an area’s total emissions, the action cannot proceed unless mitigation measures are specified that would bring the proposed project into conformity. The *de minimis* emission rates for evaluating general conformity in the San Joaquin Valley Air Basin are shown in **Table 3**.

TABLE 3: GENERAL CONFORMITY DE MINIMIS EMISSION RATES FOR THE SAN JOAQUIN VALLEY AIR BASIN

Pollutant	National Primary Attainment Status	De Minimis Emission Rate (tons/year)
Ozone (VOCs or NO _x)	Nonattainment/ Extreme	10
Respirable Particulate Matter (PM ₁₀)	Attainment/ Maintenance	100
Fine Particulate Matter (PM _{2.5})	Nonattainment/ Serious	70
Carbon Monoxide	Attainment	n/a
Sulfur Dioxide (SO ₂) or Nitrogen Dioxide (NO ₂)	Attainment	n/a
Lead (Pb)	No Designation	n/a

Sources: EPA 2024a.

Existing Conditions – Hazardous Air Pollutants

Hazardous air pollutants are air pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations. Hundreds of different types of hazardous air pollutants exist, with varying degrees of toxicity. Many are confirmed or suspected carcinogens or are known or suspected of causing birth defects or neurological damage. For some chemicals, such as carcinogens, no thresholds exist below which exposure can be considered risk-free. Hazardous air pollutants such as acetaldehyde, benzene, and formaldehyde are emitted from fossil fuel combustion sources. Sources include stationary sources, area-wide sources, and mobile sources. The EPA list includes 188 hazardous air pollutants regulated under the Clean Air Act.

Construction equipment would produce combustion-related emissions of hazardous air pollutants. A screening assessment was performed using the SJVAPCD “prioritization calculator.”¹ The prioritization screening found that with implementation of NO_x reduction environmental protection measures, diesel particulate matter (DPM) emissions of 0.7 tons per year resulted in a prioritization score of 10 or less at distances beyond 2,000 meters from the project area for each of the action alternatives. SJVAPCD recommends conducting a refined analysis if an action results in a prioritization score of 10 or more. Because all receptors are more than 2,000 meters from the project area, it was determined that there is no need for refined health risk assessment modeling.

¹ <https://www.valleyair.org/media/nr3oycv2/prioritization-calculator.xls>

2 General Conformity Components

The General Conformity process has four main components: an emissions analysis, an applicability determination, mitigation commitments, and an agency and public review. A discussion of each component of the process follows. The General Conformity Determination is the responsibility of the federal agency (USBR for the Del Puerto Canyon Reservoir Project) and is subject to review by the air agencies for the local airsheds, the EPA, other agencies, and the public.

2.1 Emissions Analysis

Emissions were calculated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.29. Construction of the Action Alternatives would require large amounts of grading, soil movement, and use of construction equipment that generates criteria air pollutants, diesel emissions, and dust. Detailed project-specific construction schedules and material movement estimates are summarized in the Modeling Inputs and Assumptions in Attachment 1.

2.1.1 Construction Emissions by Alternative

Construction Criteria Pollutant– 82 TAF Preferred Action

Estimated emissions from construction of the Preferred Action are shown in **Table 4**. These emissions are based on estimates of the number of personnel required to construct each element, the number of truckloads of material required for each element, the number and types of construction equipment required, and the number of construction days. More information on the assumptions and inputs used in the CalEEMod calculations to estimate emissions is contained in Attachment 1. The emissions represent emissions over the total duration of construction, which would occur over a number of years.

TABLE 4: CONSTRUCTION CRITERIA POLLUTANT– 82 TAF PREFERRED ACTION (TONS PER YEAR) – MITIGATED

Year	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}
2026	6.26	1.08	0.12	0.01	0.54	0.27
2027	32.5	4.13	0.66	0.06	3.44	1.64
2028	69.8	12.1	1.54	0.14	6.29	2.88
2029	108	22.4	2.57	0.24	9.83	4.38
2030	87.8	18.1	2.11	0.20	8.25	3.70
2031	3.75	1.10	0.14	0.01	0.14	0.05
De Minimis Emission Rate	n/a	10	10	n/a	100	70

Source: Woodard & Curran staff analysis, see Attachment 1.

Notes: CO = carbon monoxide, NO_x = nitrogen oxides, VOC = volatile organic compounds, SO_x = sulfur oxides, PM = particulate matter. Totals are rounded to the nearest one hundredth.

Construction Criteria Pollutant– 40 TAF Alternative

Estimated emissions for construction of the 40 TAF Alternative are shown in **Table 5**. These emissions are based on estimates of the number of personnel required to construct each element, the number of truckloads of material required for each element, the number and types of construction equipment required, and the number of construction days. More information on the assumptions and inputs used in the CalEEMod calculations to estimate emissions is contained in Attachment 1. The emissions represent emissions over the total duration of construction, which would occur over a number of years.

TABLE 5: CONSTRUCTION CRITERIA POLLUTANT– 40 TAF ALTERNATIVE (TONS PER YEAR) - MITIGATED

Year	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}
2026	67.2	12.6	1.65	0.16	6.56	3.01
2027	55.5	10.7	1.41	0.12	6.31	2.82
2028	6.62	1.22	0.19	0.02	0.70	0.29
2029	0.31	0.12	0.02	<0.01	0.12	0.03
De Minimis Emission Rate	n/a	10	10	n/a	100	70

Source: Woodard & Curran staff analysis, see Attachment 1.

Notes: CO = carbon monoxide, NO_x = nitrogen oxides, VOC = volatile organic compounds, SO_x = sulfur oxides, PM = particulate matter. Totals are rounded to the nearest one hundredth.

Construction Criteria Pollutant– Ingram Canyon Alternative

Estimated emissions for construction of the Ingram Canyon Alternative are shown in **Table 6**. These emissions are based on estimates of the number of personnel required to construct each element, the number of truckloads of material required for each element, the number and types of construction equipment required, and the number of construction days. More information on the assumptions and inputs used in the CalEEMod calculations to estimate emissions is contained in Attachment 1. The emissions represent emissions over the total duration of construction, which would occur over a number of years.

TABLE 6: CONSTRUCTION CRITERIA POLLUTANT– INGRAM CANYON ALTERNATIVE (TONS PER YEAR) - MITIGATED

Year	CO	NO _x	VOC	SO _x	PM ₁₀	PM _{2.5}
2026	60.7	10.4	1.53	0.12	6.69	3.14
2027	70.1	12.1	1.76	0.14	7.71	3.60
2028	69.4	13.8	1.69	0.15	8.12	3.71
2029	48.4	8.67	1.08	0.10	5.68	2.57
2030	1.68	0.16	0.03	<0.005	0.08	0.02
De Minimis Emission Rate	n/a	10	10	n/a	100	70

Source: Woodard & Curran staff analysis, see Attachment 1.

Notes: CO = carbon monoxide, NO_x = nitrogen oxides, VOC = volatile organic compounds, SO_x = sulfur oxides, PM = particulate matter. Totals are rounded to the nearest one hundredth.

2.1.2 Operational Emissions by Alternative

Minor operation-related air emissions would result from mobile sources associated with ongoing operations and maintenance of the proposed facilities. Emissions from the proposed relocated roadway were not quantified because the relocated roadway is expected to result in reduced vehicle miles traveled per year compared to current conditions. The analysis assumed each of the action alternatives would result in an additional approximately 200 trips per day for ongoing operations and maintenance.

Air emissions would also result from energy consumed to power the conveyance facilities, pumping plant, and other components. These operations are estimated to consume 31,700,000 kWh per year for the 82 TAF Preferred Action, 11,900,000 kWh per year for the 40 TAF Alternative, and 33,300,000 kWh per year for the Ingram Canyon Alternative. Stanislaus County is served by three energy providers: Pacific Gas and Electric (PG&E), Modesto Irrigation District (MID), and Turlock Irrigation District (TID). TID provides power to the Del Puerto Canyon project area and would likely supply energy required for operation of the action alternatives located at Del Puerto Canyon. Furthermore, for modeling purposes, TID has higher - therefore, more conservative - pollutant emissions factors than PG&E. The Ingram Canyon project area is outside of the service area of TID; therefore, this analysis assumed the action alternative at the Ingram Canyon site would be served by PG&E. This analysis only calculates direct emissions of criteria pollutants from energy sources that combust on-site, such as natural gas. Criteria pollutant emissions from power plants are associated with the power plants themselves, which are stationary sources permitted by air districts and/or the EPA, and are subject to local, state and federal control measures. Thus, this analysis does not calculate or attribute emissions of criteria pollutants from electricity consumption to individual projects or electricity users. Criteria pollutants associated with the proposed project electricity facilities would be permitted stationary sources and would undergo separate permitting procedures that are assumed to result in emissions controls.

2.1.3 Emissions Analysis Summary

Project emissions of criteria pollutants occurring within a nonattainment or maintenance area are compared to the applicable area thresholds for that pollutant, as displayed in Tables 4, 5, and 6 above. According to SJVAPCD policy (SJVAPCD 2023):

- When a pollutant exceeds its General Conformity threshold, General Conformity requires mitigation of that pollutant only.
- The General Conformity regulations do not specifically limit the mitigation of a pollutant to only the year it exceeds its General Conformity threshold. Therefore, when a pollutant exceeds its General Conformity threshold for one year, General Conformity requires mitigation of that pollutant for all project years.
- When a pollutant exceeds its General Conformity threshold, General Conformity requires full mitigation down to zero. Emissions of any pollutant exceeding a threshold shall be fully mitigated such that there is no net increase in emissions of that pollutant as a result of the project.

Controlled project pollutant emissions estimated within the San Joaquin Valley Air Basin are below the *de minimis* thresholds for VOC, PM₁₀, and PM_{2.5}. Estimated project emissions for NO_x as a

contributor to ozone formation within the San Joaquin Valley Air Basin, however, are estimated to exceed the *de minimis* threshold. Per mitigation measure AIR-1, if all feasible on-site measures have been implemented and annual emissions of NO_x are anticipated to still be above 10 tons per year for any year during construction, then the Project Sponsors¹ will enter into a Voluntary Emissions Reduction Agreement (VERA) with SJVAPCD, which will achieve net zero annual NO_x emissions in every year of project construction. Nonetheless, a General Conformity Determination is required for NO_x emissions within the San Joaquin Valley Air Basin.

2.2 Applicability

The General Conformity Rules established *de minimis* thresholds to screen projects for the potential to impose significant adverse air quality effects. Projects with annual total emissions from direct and indirect emissions less than the *de minimis* thresholds are not considered to be significant and do not require a General Conformity Determination. The *de minimis* thresholds vary based upon the severity of ambient pollution in an area. **Table 7** summarizes the *de minimis* thresholds applicable for the Del Puerto Canyon Reservoir Project area. Project emissions above these thresholds require a General Conformity Determination to demonstrate how emissions will be controlled and mitigated.

TABLE 7: GENERAL CONFORMITY DE MINIMIS ANNUAL THRESHOLDS FOR THE DEL PUERTO CANYON RESERVOIR PROJECT AREA

Pollutant	Primary Attainment Status/ Classification	De Minimis Emission Rate (tons/year)
Ozone (VOCs or NO _x)	Nonattainment/ Extreme	10
Respirable Particulate Matter (PM ₁₀)	Attainment/ Maintenance*	100
Fine Particulate Matter (PM _{2.5})	Nonattainment/ Serious	70

*On September 25, 2008, US Environmental Protection Agency redesignated the San Joaquin Valley to attainment for the PM₁₀ National Ambient Air Quality Standard (NAAQS) and approved the 2007 PM₁₀ Maintenance Plan. Source: EPA 2024a.

2.3 Mitigation Commitments

Construction of the Del Puerto Canyon Reservoir Project will require the use of many pieces of off-road diesel-fueled construction equipment. Per mitigation measure AIR-1, the Project Sponsors will reduce NO_x emissions through specification of an emissions-controlled vehicle fleet, and secondly through obtaining NO_x emissions offsets for any year in which the emissions with implementation of equipment controls exceed the *de minimis* threshold of 10 tons of NO_x emitted within the San Joaquin Valley Air Basin boundary such that there is no net increase in emissions of NO_x as a result of the project. Tables 4, 5, and 6 present the estimated emissions with equipment controls applied, assuming all feasible off-road diesel-fueled equipment will be equipped with a Tier 4 Final engine.

¹ The Project Sponsors for the Del Puerto Canyon Reservoir Project are Del Puerto Water District (DPWD) and the San Joaquin River Exchange Contractors Water Authority (Exchange Contractors).

Emission offsets will not be required if emissions can be maintained below 10 tons per year of NO_x in the San Joaquin Valley Air Basin through equipment control measures.

2.4 Agency Reporting and Public Review

USBR must provide a notice of the Draft General Conformity Determination on the proposed action to the entities listed below: appropriate EPA Regional Office(s), State, local, and tribal air quality agencies and, where applicable, the agency designated under section 174 of the Act and the Metropolitan Planning Organization (MPO). USBR must provide at least 30 days for the public to comment before issuing a Final General Determination. USBR must document its responses to all the comments received and make the comments, response, and Final General Determination available to the public upon request.

- The EPA Region 9 Office
- State and local air quality agencies
- Any federally-recognized Indian tribal government in the nonattainment areas
- Where applicable, affected Federal land managers
- The agency designated under section 174 of the Act (the California Air Resources Board)
- The Metropolitan Planning Organization

Within 30 days after a Final General Conformity Determination is made, USBR must again notify the same parties.

USBR must make public its Draft General Conformity Determination by placing a notice by prominent advertisement in a daily newspaper of general circulation in the area affected by the Del Puerto Canyon Reservoir Project, and by providing 30 days for written public comment prior to taking any formal action on the Draft Determination.

Following the public comment period on the Draft General Conformity Determination, the USBR must document responses to all comments received. The Final General Conformity Determination must be made public by placing a notice by prominent advertisement in a daily newspaper of general circulation in the area affected by the action within 30 days of the Final General Conformity Determination. Upon request by any person, comments and responses must be made available within 30 days of the Final General Conformity Determination.

3 General Conformity Determination

The Del Puerto Canyon Reservoir Project will be in conformity with the Clean Air Act and will not cause or contribute to a new violation, nor increase the frequency or severity of existing violations of the NAAQS. The following environmental protection measures and mitigation measures will be implemented to maintain conformity.

Environmental Protection Measure: Fugitive Dust Control. All projects must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII: Control Measures for Construction Emissions of PM₁₀. According to Rule 8011, the SJVAPCD requires the implementation of control measures for fugitive dust emission sources. Dust management plans must be submitted to the SJVAPCD. The Project would implement the following control measures to reduce fugitive dust emissions and comply with SJVAPCD Regulation VIII:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All onsite unpaved roads and offsite unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported offsite, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday.
- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.
- An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall implement measures to prevent carryout and trackout.

Environmental Protection Measure: NO_x and Diesel Particulate Matter Controls. In 2007, CARB adopted a regulation to reduce diesel particulate matter and NO_x emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. CARB approved amendments in 2009 and 2010. The regulation imposes limits on unnecessary vehicle idling to five minutes and requires fleets to reduce NO_x emissions by retiring, replacing, repowering, or installing exhaust retrofits to older engines. The restrictions on adding older vehicles into fleets vary by fleet size. On November 17, 2022, CARB (CARB 2022, 2023) approved amendments to the in-use, off-road diesel-fueled fleets

regulation that require phasing out old, high-polluting vehicles (i.e., Tier 0/model year 1994 or older, Tier 1/model year 1999 or older, and Tier 2/model year 2003 or older) between 2024 and 2036. The amendment also restricts adding vehicles with Tier 3 or Tier 4 Interim engines/model year 2006 or older, beginning in 2024 for large or medium fleets (small fleets are given more time to comply). The regulation also mandates the use of R99 or R100 Renewable Diesel for all fleets, with limited exceptions, and provides flexibility options for fleets that adopt zero-emission technology. This regulation would apply to vehicles used in construction of the Project

AIR-1: Reduce NO_x Emissions

NO_x emissions associated with construction activities shall be reduced to 10 tons per year through on-site equipment and hauling vehicle mitigation measures to the extent feasible. All vehicles and equipment used during construction shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Emissions reduction methods may be chosen from any combination of the following measures:

- Use of alternative fueled vehicles
- Use of newer tier engines (Tier 4 or better)
- Use of phased material hauling trips
- Use of after-market pollution control devices to reduce emissions
- Lengthening the construction schedule to reduce the annual intensity of construction activities

These NO_x emission reduction methods simultaneously address CO emissions. The CO emissions associated with construction activities shall be reduced below 100 tons per year through a combination of the same emission reduction measures identified to reduce NO_x.

Before emissions associated with proposed project activities begin, the Del Puerto Water District and San Joaquin River Exchange Contractors Water Authority (i.e., the Project Sponsors) shall be responsible for producing a SJVAPCD-approved air quality impact assessment analysis to determine the projected maximum project emissions which incorporates the most current proposed equipment fleet, hours of operation, duration of work, and on-site NO_x reduction measures, based on final project design and phasing. If all feasible on-site measures have been implemented and annual emissions are anticipated to still be above 10 tons per year for NO_x, then the Project Sponsors shall enter into a Voluntary Emissions Reduction Agreement (VERA) with SJVAPCD. The VERA would provide pound-for-pound mitigation of air emissions increases down to a net zero emissions per year as required under general conformity through a process that develops, funds, and implements emission reduction projects. To ensure emission reductions targeted by the VERA occur at the same time as project emissions, and thereby achieve net zero annual emissions, the Project Sponsors shall enter into a VERA with SJVAPCD prior to any ground-breaking activities associated with proposed project activities. SJVAPCD would serve as administrator of the emissions reduction projects and verifier of the successful mitigation effort.

Under the VERA, the Project Sponsors shall agree to mitigate project-specific emissions by providing funds for the SJVAPCD's Emission Reduction Incentive Program (ERIP). The funds would be disbursed by ERIP in the form of grants for projects that achieve emission reductions. Types of emission reduction projects that have been funded in the past include electrification of stationary

internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors. The Project Sponsors would request that funding disbursement priority would be given to emission reduction projects of Partner landowners. The initial agreement would generally be based on the projected maximum emissions increases as calculated by a SJVAPCD-approved air quality impact assessment and contain the corresponding maximum fiscal obligation. However, because the goal is to mitigate actual emissions, the SJVAPCD has designed flexibility into the VERA such that the final mitigation would be based on actual emissions related to the Project as determined by actual equipment used, hours of operation, duration of work, and consideration of equipment control measures designed to alleviate project emissions. After the Project is mitigated, the SJVAPCD would certify to the Project Sponsors that the mitigation is completed, providing the Project Sponsors with an enforceable mitigation measure demonstrating that project-specific emissions have been mitigated to de minimis levels.

AIR-2 Best Performance Standards

The Project Sponsors shall implement all feasible Best Performance Standards. The SJVAPCD defines Best Performance Standards as “the most effective in-practice means of reducing or limiting emissions from an emissions source.”

Types of Best Performance Standards that the proposed project shall implement during construction could include but would not be limited to:

- Use equipment types that rely on electric and/ or hybrid fuel. Note that biodiesel fuel use, while beneficial for reducing particulate matter emissions, does not have a substantial effect, and may actually increase, NO_x and CO_{2e} emissions.
- Limit the size of the construction vehicle fleet, especially vehicles with high Hp (e.g., 5,000 Hp), as much as possible.
- Limit the amount of time that construction vehicles are operating.
- Maintain construction equipment in the best possible working order to maximize engine fuel efficiency.
- All equipment shall be operated by a properly trained worker to minimize unnecessary vehicle use.
- Encourage workers to carpool to and from the site.
- Phase vendor and hauling trips.

Types of Best Performance Standards that the proposed project shall implement during long-term operations include:

- Implement the most energy efficient equipment design possible.
- Rely on alternative sources of energy, such as solar, hydro or wind power.
- Encourage operations and maintenance employees to carpool or otherwise commute using a method other than a single-occupancy fossil-fuel powered vehicle.

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Attachment 1 – Modeling Inputs and Assumptions

Project Construction Equipment and Vehicles

The installation of the proposed facilities would require various off-road equipment. Following are descriptions of typical construction operations for the component of the project, as well as a summary of estimated construction equipment and duration of use for each component. All construction information is based on preliminary facility concepts, and if construction methods change materially, supplemental environmental review would be conducted.

1. Reservoir Facilities

Based on the expected dimensions of the main dam and saddle dams, it is estimated that construction of the dam embankments would proceed at a rate of 20,000 cubic yards/day. This assumes a production rate of 3,000 cubic yards/day to place up to 12,000 cubic yards during each 10-hour day shift, and 8,000 cubic yards placed during each 10-hour nighttime shift. Approximately 10 percent of the embankment volume would be imported material for each dam. Placement of imported material would primarily occur during the final year of construction of the dam.

Table 1: Dam and Reservoir Physical Characteristics - Comparison of Alternatives shows the dimensions of the dam and reservoir for each alternative.

Table 1: Dam and Reservoir Physical Characteristics - Comparison of Alternatives

	Capacit y (TAF)	Surface Area (acres)	Dam Embankmen t Volume (million CY)	Dam Height (feet)	Dam Crest Elevatio n	Dam crest length h (feet)	Distanc e to DMC (miles)	Max Pum p Lift (feet)
Ingram Canyon	40	435	8.4	310	800	1,510	3.3	600
DPCR 2 82 AF	82	897	10.2	260	480	1,409	0.9	283
DPCR 3 40 AF	40	617	4.2	190	410	950	0.9	213

Excavation of soil on site for use in constructing the dam is estimated to proceed at rate of 4,000 cubic yards per day. Foundation drilling and grouting is estimated to proceed at 1,200 square yards per month.

Construction equipment and worker vehicles and estimated duration during construction of the reservoir facilities is summarized in **Table 2**. These estimates are combined summaries of construction equipment and durations for the various stages of the reservoir construction including site preparation, embankments, saddle dams, inlet/outlet works, spillway, and site restoration. These estimates assume two 10-hour shifts per day, five days per week during active construction, and construction materials such as steel, concrete formwork and ready-mix concrete would be hauled to the site from offsite sources.

Table 2: Summary of Construction Equipment and Duration for Reservoir Facilities DPCR 82-TAF

Equipment	Equip Hours	Equip Days*	Trips**
Grader	478	24	N/A
Hydraulic excavators (CAT375 or equivalent)	3,126	156	N/A
Hydraulic excavator (CAT 5130B or equivalent)	848	42	N/A
Backhoe loader	696	35	N/A
Push-pull scraper	60,084	3,004	N/A
Water truck, 13,000 gallons	32,002	1,600	N/A
Dump truck	3,556	178	45,021
Soil compactor	26,312	1,316	N/A
Track loader	630	32	N/A
Bulldozer	26,380	1,319	N/A
Concrete truck	6,984	349	5,655
Dump Truck	3,134	157	862
Flatbed truck	6,315	363	1,251
Pickup truck	2,664	133	264
Transfer dump truck and trailer	23,946	1,197	23,696
Vacuum truck, 5,000 gallons	396	20	N/A
Worker vehicles	24,409		20,341
<i>Assumes a 60-mile roundtrip at 50 mph with 1.5 occupants per vehicle</i>			
Total:	221,959	9,925	97,089

*All equipment is assumed to be utilized twenty (20) hours per day.

**Trips do not apply to equipment operating within a distinct area.

Table 3: Summary of Construction Equipment and Duration for Reservoir Facilities DPCR 40-TAF

Equipment	Equip Hours	Equip Days*	Trips**
Grader	150	7	N/A
Hydraulic excavators (CAT375 or equivalent)	981	49	N/A
Hydraulic excavator (CAT 5130B or equivalent)	266	13	N/A
Backhoe loader	218	11	N/A
Push-pull scraper	18,850	942	N/A
Water truck, 13,000 gallons	10,040	502	N/A
Dump truck	1,116	56	14,164
Soil compactor	8,255	413	N/A
Track loader	198	10	N/A
Bulldozer	8,276	414	N/A
Concrete truck	2,191	110	1,782
Dump Truck	983	49	269
Flatbed truck	1,981	99	341
Pickup truck	836	42	83
Transfer dump truck and trailer	7,512	376	7,443
Vacuum truck, 5,000 gallons	124	6	N/A
Worker vehicles	7,658	-	6,381
<i>Assumes a 60-mile roundtrip at 50 mph with 1.5 occupants per vehicle</i>			
Total:	69,635	3,099	30,465

*All equipment is assumed to be utilized twenty (20) hours per day.

**Trips do not apply to equipment operating within a distinct area.

Table 4: Summary of Construction Equipment and Duration for Reservoir Facilities DPCR Ingram Canyon

Equipment	Equip Hours	Equip Days*	Trips**
Grader	394	20	N/A
Hydraulic excavators (CAT375 or equivalent)	2,574	129	N/A
Hydraulic excavator (CAT 5130B or equivalent)	698	35	N/A
Backhoe loader	573	29	N/A
Push-pull scraper	49,481	2,474	N/A
Water truck, 13,000 gallons	26,355	1,318	N/A
Dump truck	2,928	146	36,927
Soil compactor	21,669	1,083	N/A
Track loader	519	26	N/A
Bulldozer	21,725	1,086	N/A
Concrete truck	5,752	288	4,667
Dump Truck	2,581	129	708
Flatbed truck	5,201	260	896
Pickup truck	2,194	110	218
Transfer dump truck and trailer	19,720	986	19,519
Vacuum truck, 5,000 gallons	326	16	N/A
Worker vehicles	20,102	-	16,751
<i>Assumes a 60-mile roundtrip at 50 mph with 1.5 occupants per vehicle</i>			
Total:	182,791	8,135	79,687

*All equipment is assumed to be utilized twenty (20) hours per day.

**Trips do not apply to equipment operating within a distinct area.

2. Conveyance Facilities

Open-cut construction is expected to occur in agricultural land including unpaved farm roads. Installation of dewatering wells may be required prior to start of excavation depending on the soil type and groundwater level. Water pumped from the excavation area must be properly disposed to nearby irrigation ditches or impoundments in accordance with relevant permitting requirements. Dewatering pumps would run continuously (24 hours per day) in the open trench areas while excavation is taking place, to maintain the groundwater level below the bottom of trench. After the pipeline is installed and backfilled, the dewatering pumps would be removed and relocated to the next segment of pipeline construction. Heavy equipment for excavation would typically involve continuous use of an excavator which would sidecast excavated soil along the pipeline alignment. That material would be reused to backfill the pipeline trench. Excess material would be off hauled in dump trucks to the reservoir construction area where it can be used for embankment construction. Dump trucks hauling material from off-site sources for pipeline bedding and backfill would make semi-continuous trips to the site as pipe is being installed. An excavator or crane would be used to lift pipe segments from a flat-bed delivery truck and position the pipe in the trench. Temporary trench plates would be installed over the trench at the end of each workday. Final trench cover and marking typically would be done for the entire pipeline length after installation.

Trenchless pipe installation would involve use of ground tunneling machine for 10 hours per day with associated mud collection pumps running simultaneously.

Table 5 shows construction equipment and worker vehicles and duration estimates for the pipeline.

Conveyance facilities would generate spoil associated with construction of tunnels and open-cut construction of pipelines. Approximately 66 percent of the pipelines would be constructed using open cut methods. Assuming an average of 100 feet of open cut pipeline would be constructed per day (roughly 80 days of construction), a maximum of 24,500 cubic yards of excess material would be generated.. If the soils can be used for bedding, the spoil would be reduced to about 8,550 cubic yards total.

For tunnel construction, each day would generate 30 cubic yards of excess material or 3 truck trips per day.

The following values in **Table 5** show the equipment and worker vehicles and duration for the construction of the conveyance pipeline for the 82-TAF (Baseline project). This will consist of the installation of an 84-in pipeline, with an average pipe cover of 8-ft. The approximate total length of the pipeline will be 11,850 ft, 3,850 ft of tunnel length, and 8,000 ft of open-cut length.

Table 5: Equipment and Duration for Construction of Pipeline DPCR 82-TAF

Equipment Type	Estimated Number Used (per day)	Estimated Duration (within a day)	Open Cut Trenching–Estimated Total Number of Working Days of Use During Entire Construction	Tunneling–Estimated Total Number of Working Days of Use During Entire Construction
Open Cut Trench only				
Excavator	2	10	60	-
Bulldozer	1	4	60	-
Dewatering pumps	1	24	60	-
Off-road dump trucks	1	10	60	-
Highway legal dump truck	14	10	50	-
Front end loader	2	10	60	-
Flatbed truck	8	10	15	-
Pickup trucks	3	5	300	-
Worker vehicles	8	2	300	--
Crane	1	6	40	-
Tunneling and Open Cut when overlapping				-
Tunnel boring machine	1	10	90	270
Dewatering pumps	1	24	90	270
Off-road dump trucks	1	10	90	180
Highway legal dump truck	7	10	130	770
Pickup trucks	2	5	140	840
Worker vehicles	7	2	140	840
Front end loader	1	8	90	550
Crane	1	6	130	430

The following values in **Table 6** shows the equipment and worker vehicles and duration for the construction of the conveyance pipeline for the 40-TAF option. This will consist of the installation of an 66-in pipeline, with an average pipe cover of 8-ft. The approximate total length of the pipeline will be 11,850 ft, 3,850 ft of tunnel length, and 8,000 ft of open-cut length. For tunnel construction, a production rate of 10 linear feet per day is assumed and a tunnel diameter of 9 feet for a total of 145 days of construction. Each day would generate 30 cubic yards of excess material or 3 truck trips per day. The total days required for open-cut work is approximately 60 days, this is scaled based on excavation of cubic yardage.

Table 6: Equipment and Duration for Construction of Pipeline DPCR 40-TAF

Equipment Type	Estimated Number Used (per day)	Estimated Duration (within a day)	Open Cut Trenching—Estimated Total Number of Working Days of Use During Entire Construction	Tunneling—Estimated Total Number of Working Days of Use During Entire Construction
Open Cut Trench				
Excavator	2	10	45	-
Bulldozer	1	4	45	-
Dewatering pumps	1	24	45	-
Off-road dump trucks	1	10	45	-
Highway legal dump truck	14	10	38	-
Front end loader	2	10	45	-
Flatbed truck	8	10	11	-
Pickup trucks	3	5	226	-
Worker vehicles	8	2	226	--
Crane	1	6	30	-
Tunneling				
Tunnel boring machine	1	10	90	270
Dewatering pumps	1	24	90	270
Off-road dump trucks	1	10	90	180
Highway legal dump truck	7	10	130	770
Pickup trucks	2	5	140	840
Worker vehicles	7	2	140	840
Front end loader	1	8	90	550
Crane	1	6	130	430

Conveyance facilities for Ingram Canyon would generate spoil associated with construction of tunnels and open-cut construction of pipelines. Approximately 81 percent of the pipelines would be constructed using open cut methods. Assuming an average of 100 feet of open cut pipeline would be constructed per day (roughly 163 days of construction), a maximum of 49,800 cubic yards of excess material would be generated.

For tunnel construction for Ingram Canyon, a production rate of 10 linear feet per day is assumed and a tunnel diameter of 9 feet for a total of 145 days of construction. Each day would generate 30 cubic yards of excess material or 3 truck trips per day.

The following values in **Table 7** shows the equipment and worker vehicles and duration for the construction of the conveyance pipeline for the Ingram Canyon option. This will consist of the installation of an 84-in pipeline, with an average pipe cover of 8-ft. The approximate total length of the pipeline will be 20,100 ft, 3,850 ft of tunnel length, and 16,250 ft of open-cut length. The total days required for open-cut work is approximately 163 days; this is scaled based on excavation of cubic yardage.

Table 7: Equipment and Duration for Construction of Pipeline DPCR Ingram

Equipment Type	Estimated Number Used (per day)	Estimated Duration (within a day)	Open Cut Trenching—Estimated Total Number of Working Days of Use During Entire Construction	Tunneling—Estimated Total Number of Working Days of Use During Entire Construction
Open Cut Trench				
Excavator	2	10	122	-
Bulldozer	1	4	122	-
Dewatering pumps	1	24	122	-
Off-road dump trucks	1	10	122	-
Highway legal dump truck	14	10	102	-
Front end loader	2	10	122	-
Flatbed truck	8	10	30	-
Pickup trucks	3	5	609	-
Worker vehicles	8	2	609	--
Crane	1	6	81	-
Tunneling				
Tunnel boring machine	1	10	90	270
Dewatering pumps	1	24	90	270
Off-road dump trucks	1	10	90	180
Highway legal dump truck	7	10	130	770
Pickup trucks	2	5	140	840
Worker vehicles	7	2	140	840
Front end loader	1	8	90	550
Crane	1	6	130	430

3. Pumping Plant

Table 8, Table 9, and Table 10 present earthwork estimate to construct the pumping plant. These estimates are based on preliminary structural sizing and site layouts of buildings, mechanical and electrical facilities, with the following additional assumptions:

- Pipelines and buried vaults are installed with about 5 feet of cover over the top of the pipe;
- Structural excavations would extend 2 feet beneath slabs and major structures to allow for placement of 2 feet of compacted foundation material fill (crushed rock, e.g. Caltrans Class 2 Aggregate Base);
- Below grade structures are excavated within at least 2 feet of final exterior walls;
- The pumps would be installed in individual pump bays in a large wet well; and

- Existing soils are suitable for backfill of pipe trenches above the pipe embedment zone and for backfill of below grade concrete structures.

Table 8: Earthwork to Construct Pumping Plant DPCR 82-TAF

Earthwork Component	Volume (cubic yards)
Cut	15,000
Fill	9,700
Native Fill ¹	3,200
Import Fill ²	6,500
Net Off Haul to Spoil	5,300

- Imported fill is assumed to include pipe bedding and pipe zone backfill, structural foundation subgrade fill and road base material. Structure backfill around walls is assumed to be processed native material.
- Native fill is assumed to include pipe trench zone backfill, structure backfill behind below grade walls and embankment fills. Native fill reused on site is assumed to be stockpiled onsite until used; no off-site truck traffic is required for hauling.

Table 9: Earthwork to Construct Pumping Plant DPCR 40-TAF

Earthwork Component	Volume (cubic yards)
Cut	15,000
Fill	9,700
Native Fill ¹	3,200
Import Fill ²	6,500
Net Off Haul to Spoil	5,300

- Imported fill is assumed to include pipe bedding and pipe zone backfill, structural foundation subgrade fill and road base material. Structure backfill around walls is assumed to be processed native material.
- Native fill is assumed to include pipe trench zone backfill, structure backfill behind below grade walls and embankment fills. Native fill reused on site is assumed to be stockpiled onsite until used; no off-site truck traffic is required for hauling.

Table 10: Earthwork to Construct Pumping Plant DPCR Ingram

Earthwork Component	Volume (cubic yards)
Cut	15,000
Fill	9,700
Native Fill ¹	3,200
Import Fill ²	6,500
Net Off Haul to Spoil	5,300

- Imported fill is assumed to include pipe bedding and pipe zone backfill, structural foundation subgrade fill and road base material. Structure backfill around walls is assumed to be processed native material.
- Native fill is assumed to include pipe trench zone backfill, structure backfill behind below grade walls and embankment fills. Native fill reused on site is assumed to be stockpiled onsite until used; no off-site truck traffic is required for hauling.

Based on the volumes of import material and off haul, it is estimated that 1,200 highway truck trips may be required for hauling import and off-hauled material (round trip). Spoil areas are likely to be developed within the reservoir inundation area, shortening the haul for spoiling. Import material trips would be from commercial quarries.

The total volume of concrete to be placed at the site is estimated to be 900 to 1,000 cubic yards. This concrete would be sourced from and mixed at an off-site commercial concrete plant or a portable concrete plant established for the dam facility construction and delivered to the site in 8 cubic yards concrete

transit mixers trucks as structures are constructed. Approximately 125 concrete truck trips would be required (round trip). Concrete would need to be placed first and then cured between 7 to 28 days prior to stripping formwork. Larger structures would be placed in multiple pours with suitable construction joints.

Other materials and equipment would be delivered to the site over the course of construction. Typically, equipment and materials are delivered on large flatbed trucks or truck-mounted shipping containers and stockpiled or stored on-site until installed. It is estimated that a project of this size would require up to 50 round-trip trucked deliveries of material and equipment. Construction equipment and estimated duration for construction of the pumping plant is summarized in **Table 11**. These estimates are based on an assumed construction process of 2-3 years.

Table 11: Equipment and Duration for Construction of Pumping Plant DPCR 82-TAF

Equipment	Estimated Number Used (per day)	Estimated Duration within a Day (Hours total when used for work item)	Estimated Total Number of Working Days of Use During Entire Construction
Excavator	2	6	100
Bulldozers	2	6	30
Off-road dump trucks	6	6	25
Highway legal dump trucks	8	6	30
Front end loader	2	5	30
Backhoe	2	2	30
Vibrating roller	4	6	30
Grader	2	6	30
Asphalt paving machine	1	6	15
5-ton crane	1	6	200
2-ton crane	1	6	80

Table 12: Equipment and Duration for Construction of Pumping Plant DPCR 40-TAF

Equipment	Estimated Number Used (per day)	Estimated Duration within a Day (Hours total when used for work item)	Estimated Total Number of Working Days of Use During Entire Construction
Excavator	2	6	100
Bulldozers	2	6	30
Off-road dump trucks	6	6	25
Highway legal dump trucks	8	6	30
Front end loader	2	5	30
Backhoe	2	2	30
Vibrating roller	4	6	30
Grader	2	6	30
Asphalt paving machine	1	6	15
5-ton crane	1	6	200
2-ton crane	1	6	80

Table 13: Equipment and Duration for Construction of Pumping Plant DPCR Ingram

Equipment	Estimated Number Used (per day)	Estimated Duration within a Day (Hours total when used for work item)	Estimated Total Number of Working Days of Use During Entire Construction
Excavator	2	6	100
Bulldozers	2	6	30
Off-road dump trucks	6	6	25
Highway legal dump trucks	8	6	30
Front end loader	2	5	30
Backhoe	2	2	30
Vibrating roller	4	6	30
Grader	2	6	30
Asphalt paving machine	1	6	15
5-ton crane	1	6	200
2-ton crane	1	6	80

3. Road Relocation

Table 14 identifies ranges of earthwork expected for construction. The majority of fill is expected to be obtained on site. The excavation and placement of embankment materials would follow the procedures described in Section 19 of the Caltrans Standard Specifications.

Table 14: Earthwork (cubic yards) to Construct Roadway DPCR 82-TAF UPDATED

Excavation	Fill	Net
920,000 - 1,380,000	920,000 - 1,380,000	0

Equipment that would be used to build the roadway is summarized in **Table 15**. These estimates are based on the length of road, volume of earthwork, standard construction practices and road design requirements. This information assumes a contractor would be able to operate multiple pieces of equipment at several locations along the alignment at the same time.

Table 15: Equipment and Duration for Construction of Roadway DPCR 82-TAF

Equipment Type	Estimated Number Used (per day)	Estimated Duration within a Day (Hours total when used for work item)	Estimated Total Number of Working Days of Use During Entire Construction
Excavator	8	10	200
Bulldozers	8	10	200
Off-road dump trucks	8	10	200
Scrapers	4	10	200
Blades	2	20	347
Compactors	2	20	347
Water Trucks	5	10	200
Highway legal dump truck	17	8	547
Front end loader	6	5	200
Concrete truck	3	10	200
Vibrating roller	4	20	347
Asphalt paving machine	1	20	347

It is estimated that 1,400 off-site truck trips using highway approved dump trucks would be required to obtain and place the crushed rock. Crushed rock would come from Caltrans approved quarries with the specific quarry selected by the Construction Contractor. A similar amount of asphalt concrete pavement (ACP) would be required for both alternatives. Approximately 30,000 tons of ACP would be required for either alternative. Placing ACP would require approximately 18 days.

Because this is a new roadway alignment, construction would progress relatively quickly because the contractor would not be constrained with maintaining open lanes of traffic as is required for projects that add a lane to an existing highway. Construction is expected to take up to 24 months and is expected to proceed in one continuous phase.

4. Utilities Relocation

a. Power Lines

Construction equipment and estimated duration required for the relocation of the power transmission lines is summarized in **Table 16**. Relocation would require more work than raising the towers, so relocation is assumed for purposes of evaluating impacts associated with construction activities. This assumes up to 47 steel towers and 30 wooden poles would be constructed for the five existing transmission lines to be relocated, with individual equipment crews moving sequentially to the next tower site when a specific work task is completed for a total construction period of approximately 30 months.

Table 16: Equipment and Duration for Relocation of Transmission Lines DPCR 82-TAF

Equipment Type	Estimated Number Used (per day, per tower site)	Estimated Duration within a Day (Hours total when used for work item)	Estimated Total Number of Working Days of Use During Construction (per tower site)
Grader (site preparation and site restoration)	1	10	720
Bulldozer	1	10	720
Auger drill rig	1 for lattice, one for poles	8	720
Concrete truck	1 for lattice, one for poles	10	720
Cranes	1	8	720
Helicopter	1 to fly in tower; 10 for conductoring	8	720
Flatbed trucks for material deliveries (3-axel truck)	6	8	720
Pick-up trucks for workers	10	4	720

b. Petroleum Pipeline

Relocation of the petroleum pipeline would be expected to take about four months, after the approximate 2-month period for manufacturing the new pipeline. Construction equipment and estimated duration required for the relocation is summarized in **Table 17**.

Table 17: Equipment and Duration for Relocation of Petroleum Pipeline DPCR 82-TAF

Equipment Type	Estimated Number Used	Duration
Excavator	2	4 months
Bulldozer for easement preparation	2	1 week
Front end loader	2	4 months
Pipe side booms	6	4 months
Welding trucks	6	2 months
Pick-up trucks for workers	8	4 months
Sheep's foot roller compactor	2	2 months
Paving machine	1	3 days
Double transfer trailer rigs	3 delivery loads per day	3 days
Flatbed trucks for pipe delivery	250 loads	1 week

Attachment 2 – SJVAPCD Prioritization Calculator

Name		Prioritization Calculator	
Applicability		Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in gray areas.	
Author or updater	Matthew Cegielski	Last Update	December 1, 2022
Facility:			
ID#:			
Project #:			
Unit and Process#	1-0 p1		

Operating Hours hr/yr		8,760.00				
Receptor Proximity and Proximity Factors		Cancer	Chronic	Acute	Max Score	Receptor proximity is in meters. Prioritization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.
		Score	Score	Score		
0< R<100	1.000	3.23E+03	4.79E+00	0.00E+00	3.23E+03	
100≤R<250	0.250	8.09E+02	1.20E+00	0.00E+00	8.09E+02	
250≤R<500	0.040	1.29E+02	1.92E-01	0.00E+00	1.29E+02	
500≤R<1000	0.011	3.56E+01	5.27E-02	0.00E+00	3.56E+01	
1000≤R<1500	0.003	9.70E+00	1.44E-02	0.00E+00	9.70E+00	
1500≤R<2000	0.002	6.47E+00	9.59E-03	0.00E+00	6.47E+00	
2000<R	0.001	3.23E+00	4.79E-03	0.00E+00	3.23E+00	

Receptor proximity is in meters. Prioritization scores are calculated by multiplying the total scores summed below by the proximity factors.

Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

	Enter the unit's CAS# of the substances emitted and their amounts.				Prioritization score for each substance generated below. Totals on last row.					
1-0 p1	CAS#	MW Correction	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Corrected Annual Emissions (lbs/yr)	Corrected Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
Diesel engine exhaust, particulate matter (Diesel PM)	9901	1.0000	1400.00		1.40E+03	0.00E+00	1.60E-01	3.23E+03	4.79E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
		0.0000			0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Totals								3.23E+03	4.79E+00	0.00E+00

Receptor Proximity and Proximity Factors		1-0 p1	1-0 p1	1-0 p1	1-0 p1	Total Max Score
		Max Score	Max Score	Max Score	Max Score	
0< R<100	1.000	3.23E+03	0.00E+00	0.00E+00	0.00E+00	3234.00
100≤R<250	0.250	8.09E+02	0.00E+00	0.00E+00	0.00E+00	808.50
250≤R<500	0.040	1.29E+02	0.00E+00	0.00E+00	0.00E+00	129.36
500≤R<1000	0.011	3.56E+01	0.00E+00	0.00E+00	0.00E+00	35.57
1000≤R<1500	0.003	9.70E+00	0.00E+00	0.00E+00	0.00E+00	9.70
1500≤R<2000	0.002	6.47E+00	0.00E+00	0.00E+00	0.00E+00	6.47
2000<R	0.001	3.23E+00	0.00E+00	0.00E+00	0.00E+00	3.23

Attachment 3 – CalEEMod Detailed Results

DPCR_2025_v1 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	DPCR_2025_v1
Construction Start Date	1/1/2026
Operational Year	2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.10
Precipitation (days)	25.4
Location	37.486472, -121.208722
County	Stanislaus
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2208
EDFZ	14
Electric Utility	Turlock Irrigation District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Refrigerated Warehouse-No Rail	95,858	1000sqft	2,201	95,858,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mit.	24.1	21.6	193	898	1.98	5.69	75.9	81.6	5.57	30.3	35.9	—	228,470	228,470	7.64	10.9	131	232,031
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mit.	27.7	25.6	220	1,114	2.31	6.25	101	107	6.12	42.6	48.7	—	264,819	264,819	9.25	11.7	3.89	268,135
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mit.	15.6	14.1	123	594	1.30	3.64	50.2	53.9	3.57	20.4	24.0	—	148,921	148,921	5.06	6.63	34.2	151,058
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mit.	2.85	2.57	22.4	108	0.24	0.66	9.16	9.83	0.65	3.72	4.38	—	24,655	24,655	0.84	1.10	5.66	25,009
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.62	1.56	15.8	84.3	0.13	0.26	7.36	7.63	0.26	3.52	3.78	—	13,849	13,849	0.52	0.23	4.80	13,935
2027	7.35	7.06	45.1	339	0.59	1.42	37.8	39.3	1.40	17.4	18.8	—	66,393	66,393	2.55	1.02	13.8	66,775
2028	16.7	15.6	118	676	1.30	3.55	46.2	49.8	3.48	19.5	23.0	—	147,791	147,791	5.29	4.81	61.3	149,418
2029	24.1	21.6	193	898	1.98	5.69	75.9	81.6	5.57	30.3	35.9	—	228,470	228,470	7.64	10.9	131	232,031
2030	18.2	16.4	139	680	1.53	4.32	60.0	64.3	4.23	24.5	28.7	—	174,482	174,482	5.94	7.90	85.9	177,071

2031	2.55	2.22	18.1	54.8	0.09	0.55	1.86	2.41	0.51	0.32	0.83	—	10,235	10,235	0.37	0.21	2.66	10,311
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.48	2.40	15.9	132	0.21	0.47	8.61	9.08	0.47	3.69	4.16	—	23,776	23,776	0.91	0.40	0.17	23,919
2027	7.25	7.03	45.4	335	0.59	1.42	37.8	39.3	1.40	17.4	18.8	—	66,179	66,179	2.56	1.02	0.36	66,549
2028	27.7	25.6	220	1,114	2.31	6.25	101	107	6.12	42.6	48.7	—	264,819	264,819	9.25	11.7	3.89	268,135
2029	27.0	24.3	217	997	2.17	6.25	84.1	90.4	6.12	34.0	40.1	—	249,599	249,599	8.45	11.3	3.54	253,185
2030	18.2	16.5	143	681	1.54	4.33	60.0	64.4	4.24	24.5	28.8	—	174,936	174,936	5.97	7.98	2.23	177,465
2031	7.33	6.62	57.9	244	0.53	1.74	5.73	7.47	1.65	1.53	3.18	—	60,097	60,097	2.02	2.65	0.71	60,937
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.66	0.64	5.91	34.3	0.05	0.11	2.87	2.98	0.11	1.35	1.46	—	5,789	5,789	0.22	0.10	0.83	5,824
2027	3.72	3.61	22.6	178	0.31	0.72	18.1	18.9	0.72	8.28	9.00	—	34,425	34,425	1.33	0.54	3.23	34,622
2028	9.06	8.45	66.1	382	0.74	1.94	32.5	34.5	1.91	13.9	15.8	—	84,730	84,730	3.03	2.81	15.4	85,658
2029	15.6	14.1	123	594	1.30	3.64	50.2	53.9	3.57	20.4	24.0	—	148,921	148,921	5.06	6.63	34.2	151,058
2030	12.8	11.5	99.4	481	1.08	3.03	42.2	45.2	2.97	17.3	20.3	—	123,243	123,243	4.21	5.57	25.9	125,035
2031	0.85	0.75	6.04	20.6	0.04	0.19	0.58	0.76	0.17	0.11	0.29	—	4,154	4,154	0.15	0.12	0.56	4,193
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.12	0.12	1.08	6.26	0.01	0.02	0.52	0.54	0.02	0.25	0.27	—	958	958	0.04	0.02	0.14	964
2027	0.68	0.66	4.13	32.5	0.06	0.13	3.31	3.44	0.13	1.51	1.64	—	5,699	5,699	0.22	0.09	0.53	5,732
2028	1.65	1.54	12.1	69.8	0.14	0.35	5.94	6.29	0.35	2.53	2.88	—	14,028	14,028	0.50	0.47	2.55	14,182
2029	2.85	2.57	22.4	108	0.24	0.66	9.16	9.83	0.65	3.72	4.38	—	24,655	24,655	0.84	1.10	5.66	25,009
2030	2.33	2.11	18.1	87.8	0.20	0.55	7.70	8.25	0.54	3.15	3.70	—	20,404	20,404	0.70	0.92	4.29	20,701
2031	0.15	0.14	1.10	3.75	0.01	0.03	0.11	0.14	0.03	0.02	0.05	—	688	688	0.02	0.02	0.09	694

2.4. Operations 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.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

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

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

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.68	0.63	0.59	5.85	0.01	0.01	1.44	1.45	0.01	0.37	0.38	—	1,521	1,521	0.05	0.07	3.15	1,545
Area	2,051	2,051	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	52,924	52,924	20.6	29.5	—	62,215
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	8,154	8,154	—	—	—	8,154
Total	2,052	2,052	0.59	5.85	0.01	0.01	1.44	1.45	0.01	0.37	0.38	0.00	62,598	62,598	20.7	29.5	3.15	71,914
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.63	0.58	0.67	4.85	0.01	0.01	1.44	1.45	0.01	0.37	0.38	—	1,399	1,399	0.05	0.07	0.08	1,422
Area	2,051	2,051	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	52,924	52,924	20.6	29.5	—	62,215
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	8,154	8,154	—	—	—	8,154
Total	2,052	2,052	0.67	4.85	0.01	0.01	1.44	1.45	0.01	0.37	0.38	0.00	62,477	62,477	20.7	29.5	0.08	71,791
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.63	0.58	0.63	4.94	0.01	0.01	1.42	1.43	0.01	0.36	0.37	—	1,430	1,430	0.05	0.07	1.36	1,453
Area	2,051	2,051	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	52,924	52,924	20.6	29.5	—	62,215

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	8,154	8,154	—	—	—	8,154
Total	2,052	2,052	0.63	4.94	0.01	0.01	1.42	1.43	0.01	0.36	0.37	0.00	62,508	62,508	20.7	29.5	1.36	71,822
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12	0.11	0.12	0.90	< 0.005	< 0.005	0.26	0.26	< 0.005	0.07	0.07	—	237	237	0.01	0.01	0.23	241
Area	374	374	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	8,762	8,762	3.41	4.88	—	10,300
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	1,350	1,350	—	—	—	1,350
Total	374	374	0.12	0.90	< 0.005	< 0.005	0.26	0.26	< 0.005	0.07	0.07	0.00	10,349	10,349	3.42	4.89	0.23	11,891

3. Construction Emissions Details

3.1. Roadway - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

3.2. Roadway - Excavation (2027) - Mitigated

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	4.51	4.38	29.8	199	0.37	0.91	—	0.91	0.90	—	0.90	—	39,705	39,705	1.61	0.32	—	39,841
Dust From Material Movement	—	—	—	—	—	—	27.6	27.6	—	13.4	13.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.51	4.38	29.8	199	0.37	0.91	—	0.91	0.90	—	0.90	—	39,705	39,705	1.61	0.32	—	39,841

Dust From Material Movement	—	—	—	—	—	—	27.6	27.6	—	13.4	13.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.80	12.2	82.0	0.15	0.37	—	0.37	0.37	—	0.37	—	16,317	16,317	0.66	0.13	—	16,373
Dust From Material Movement	—	—	—	—	—	—	11.4	11.4	—	5.49	5.49	—	—	—	—	—	—	—
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	0.34	0.33	2.23	15.0	0.03	0.07	—	0.07	0.07	—	0.07	—	2,702	2,702	0.11	0.02	—	2,711
Dust From Material Movement	—	—	—	—	—	—	2.07	2.07	—	1.00	1.00	—	—	—	—	—	—	—
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	0.30	0.26	0.28	5.94	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,140	1,140	0.01	0.04	4.00	1,156
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	0.05	0.02	1.83	0.31	0.01	0.03	0.49	0.52	0.03	0.13	0.17	—	1,727	1,727	0.02	0.27	3.91	1,811

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.36	4.04	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	1,015	1,015	0.01	0.04	0.10	1,028
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	0.05	0.02	1.95	0.31	0.01	0.03	0.49	0.52	0.03	0.13	0.17	—	1,727	1,727	0.02	0.27	0.10	1,808
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.13	1.82	0.00	0.00	0.45	0.45	0.00	0.11	0.11	—	430	430	< 0.005	0.02	0.71	436
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	0.02	0.01	0.79	0.13	< 0.005	0.01	0.20	0.21	0.01	0.05	0.07	—	710	710	0.01	0.11	0.69	743
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.33	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	71.3	71.3	< 0.005	< 0.005	0.12	72.2
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	< 0.005	< 0.005	0.14	0.02	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	117	117	< 0.005	0.02	0.11	123

3.3. Roadway - Excavation (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

3.4. Roadway - Excavation (2028) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.51	4.38	29.8	199	0.37	0.91	—	0.91	0.90	—	0.90	—	39,719	39,719	1.61	0.32	—	39,855
Dust From Material Movement	—	—	—	—	—	—	27.6	27.6	—	13.4	13.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm ent	0.63	0.61	4.14	27.7	0.05	0.13	—	0.13	0.12	—	0.12	—	5,519	5,519	0.22	0.04	—	5,538
Dust From Material Movemer	—	—	—	—	—	—	3.84	3.84	—	1.86	1.86	—	—	—	—	—	—	—
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 Equipm ent	0.11	0.11	0.76	5.06	0.01	0.02	—	0.02	0.02	—	0.02	—	914	914	0.04	0.01	—	917
Dust From Material Movemer	—	—	—	—	—	—	0.70	0.70	—	0.34	0.34	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.20	0.32	3.75	0.00	0.00	1.12	1.12	0.00	0.26	0.26	—	996	996	0.01	0.04	0.09	1,008
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	0.05	0.02	1.89	0.30	0.01	0.03	0.49	0.52	0.03	0.13	0.17	—	1,683	1,683	0.02	0.27	0.09	1,764
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.57	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	143	143	< 0.005	0.01	0.22	145
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	0.01	< 0.005	0.26	0.04	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	234	234	< 0.005	0.04	0.22	245
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	23.9
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	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.7	38.7	< 0.005	0.01	0.04	40.6

3.5. Dam Facilities - Site Preparation (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.6. Dam Facilities - Site Preparation (2028) - Mitigated

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	3.00	2.95	15.9	150	0.27	0.61	—	0.61	0.60	—	0.60	—	28,996	28,996	1.18	0.24	—	29,095
Dust From Material Movement	—	—	—	—	—	—	20.7	20.7	—	10.0	10.0	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.00	2.95	15.9	150	0.27	0.61	—	0.61	0.60	—	0.60	—	28,996	28,996	1.18	0.24	—	29,095
Dust From Material Movement	—	—	—	—	—	—	20.7	20.7	—	10.0	10.0	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.97	5.22	49.2	0.09	0.20	—	0.20	0.20	—	0.20	—	9,533	9,533	0.39	0.08	—	9,566

Dust From Material Movement	—	—	—	—	—	—	6.81	6.81	—	3.29	3.29	—	—	—	—	—	—	—
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	0.18	0.18	0.95	8.98	0.02	0.04	—	0.04	0.04	—	0.04	—	1,578	1,578	0.06	0.01	—	1,584
Dust From Material Movement	—	—	—	—	—	—	1.24	1.24	—	0.60	0.60	—	—	—	—	—	—	—
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	0.08	0.08	0.08	1.77	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	359	359	< 0.005	0.01	1.16	363
Vendor	0.03	0.02	0.94	0.18	0.01	0.02	0.31	0.33	0.02	0.09	0.10	—	1,059	1,059	0.02	0.16	2.26	1,109
Hauling	0.03	0.01	1.01	0.17	0.01	0.02	0.28	0.30	0.02	0.08	0.10	—	962	962	0.01	0.15	2.06	1,010
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.10	1.20	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	319	319	< 0.005	0.01	0.03	323
Vendor	0.03	0.02	1.00	0.19	0.01	0.02	0.31	0.33	0.02	0.09	0.10	—	1,059	1,059	0.02	0.16	0.06	1,107
Hauling	0.03	0.01	1.08	0.17	0.01	0.02	0.28	0.30	0.02	0.08	0.10	—	962	962	0.01	0.15	0.05	1,008
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	108	108	< 0.005	< 0.005	0.16	110
Vendor	0.01	0.01	0.32	0.06	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	348	348	0.01	0.05	0.32	364

Hauling	0.01	< 0.005	0.35	0.06	< 0.005	0.01	0.09	0.10	0.01	0.02	0.03	—	316	316	< 0.005	0.05	0.29	332
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.9	17.9	< 0.005	< 0.005	0.03	18.2
Vendor	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	57.7	57.7	< 0.005	0.01	0.05	60.3
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	52.3	52.3	< 0.005	0.01	0.05	54.9

3.7. Dam Facilities - Main Dam (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.8. Dam Facilities - Main Dam (2028) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,437	84,437	3.43	0.69	—	84,726
Dust From Material Mover	—	—	—	—	—	—	44.6	44.6	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.55	1.51	8.55	71.2	0.13	0.32	—	0.32	0.31	—	0.31	—	14,210	14,210	0.58	0.12	—	14,259
Dust From Material Mover	—	—	—	—	—	—	7.50	7.50	—	3.43	3.43	—	—	—	—	—	—	—
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 Equipm ent	0.28	0.28	1.56	13.0	0.02	0.06	—	0.06	0.06	—	0.06	—	2,353	2,353	0.10	0.02	—	2,361

Dust From Material Movement	—	—	—	—	—	—	1.37	1.37	—	0.63	0.63	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.28	3.33	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	883	883	0.01	0.04	0.08	894
Vendor	0.05	0.03	1.81	0.33	0.01	0.03	0.57	0.60	0.03	0.16	0.19	—	1,907	1,907	0.03	0.28	0.11	1,993
Hauling	0.82	0.25	29.2	4.62	0.18	0.54	7.51	8.04	0.54	2.06	2.59	—	25,969	25,969	0.38	4.14	1.44	27,212
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.61	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	153	153	< 0.005	0.01	0.23	155
Vendor	0.01	0.01	0.30	0.06	< 0.005	0.01	0.09	0.10	0.01	0.03	0.03	—	321	321	0.01	0.05	0.30	336
Hauling	0.14	0.04	4.82	0.77	0.03	0.09	1.25	1.34	0.09	0.34	0.43	—	4,370	4,370	0.06	0.70	4.04	4,583
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.4	25.4	< 0.005	< 0.005	0.04	25.7
Vendor	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	53.1	53.1	< 0.005	0.01	0.05	55.6
Hauling	0.03	0.01	0.88	0.14	0.01	0.02	0.23	0.24	0.02	0.06	0.08	—	724	724	0.01	0.12	0.67	759

3.9. Dam Facilities - Main Dam (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.10. Dam Facilities - Main Dam (2029) - Mitigated

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	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,426	84,426	3.42	0.68	—	84,715
Dust From Material Movement	—	—	—	—	—	—	44.6	44.6	—	20.4	20.4	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,426	84,426	3.42	0.68	—	84,715
Dust From Material Movement	—	—	—	—	—	—	44.6	44.6	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.59	6.42	36.3	302	0.56	1.35	—	1.35	1.33	—	1.33	—	60,304	60,304	2.45	0.49	—	60,511
Dust From Material Movement	—	—	—	—	—	—	31.8	31.8	—	14.6	14.6	—	—	—	—	—	—	—
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	1.20	1.17	6.62	55.2	0.10	0.25	—	0.25	0.24	—	0.24	—	9,984	9,984	0.40	0.08	—	10,018
Dust From Material Movement	—	—	—	—	—	—	5.81	5.81	—	2.66	2.66	—	—	—	—	—	—	—
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	0.18	0.22	4.57	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	973	973	0.01	0.03	2.87	986
Vendor	0.05	0.02	1.61	0.32	0.01	0.03	0.57	0.60	0.03	0.16	0.19	—	1,854	1,854	0.03	0.28	3.60	1,944
Hauling	0.83	0.26	26.6	4.41	0.18	0.54	7.51	8.04	0.54	2.06	2.59	—	25,284	25,284	0.38	3.96	51.1	26,524
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.17	0.25	3.11	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	867	867	0.01	0.04	0.07	878
Vendor	0.05	0.02	1.72	0.32	0.01	0.03	0.57	0.60	0.03	0.16	0.19	—	1,855	1,855	0.03	0.28	0.09	1,940
Hauling	0.82	0.25	28.3	4.45	0.18	0.54	7.51	8.04	0.54	2.06	2.59	—	25,288	25,288	0.38	3.96	1.32	26,478
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.18	2.43	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	638	638	0.01	0.02	0.89	647
Vendor	0.04	0.01	1.20	0.23	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,325	1,325	0.02	0.20	1.11	1,387
Hauling	0.59	0.18	19.8	3.16	0.13	0.38	5.30	5.68	0.38	1.45	1.83	—	18,061	18,061	0.27	2.83	15.7	18,926
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.44	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	106	106	< 0.005	< 0.005	0.15	107
Vendor	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	219	219	< 0.005	0.03	0.18	230
Hauling	0.11	0.03	3.61	0.58	0.02	0.07	0.97	1.04	0.07	0.26	0.33	—	2,990	2,990	0.05	0.47	2.61	3,133

3.11. Dam Facilities - Main Dam (2030) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.12. Dam Facilities - Main Dam (2030) - Mitigated

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	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,425	84,425	3.42	0.68	—	84,715
Dust From Material Movement	—	—	—	—	—	—	44.6	44.6	—	20.4	20.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,425	84,425	3.42	0.68	—	84,715
Dust From Material Movement	—	—	—	—	—	—	44.6	44.6	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.53	6.37	36.0	300	0.56	1.34	—	1.34	1.32	—	1.32	—	59,808	59,808	2.43	0.49	—	60,013
Dust From Material Movement	—	—	—	—	—	—	31.6	31.6	—	14.4	14.4	—	—	—	—	—	—	—
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	1.19	1.16	6.57	54.7	0.10	0.24	—	0.24	0.24	—	0.24	—	9,902	9,902	0.40	0.08	—	9,936
Dust From Material Movement	—	—	—	—	—	—	5.76	5.76	—	2.63	2.63	—	—	—	—	—	—	—
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	0.21	0.18	0.18	4.27	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	953	953	0.01	< 0.005	2.56	957
Vendor	0.05	0.02	1.53	0.30	0.01	0.03	0.57	0.60	0.03	0.16	0.19	—	1,799	1,799	0.03	0.27	3.15	1,883
Hauling	0.83	0.26	25.7	4.41	0.18	0.54	7.51	8.04	0.54	2.06	2.59	—	24,609	24,609	0.38	3.96	46.5	25,844
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.16	0.22	2.89	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	850	850	0.01	0.04	0.07	860
Vendor	0.05	0.02	1.64	0.29	0.01	0.03	0.57	0.60	0.03	0.16	0.19	—	1,799	1,799	0.03	0.27	0.08	1,880
Hauling	0.82	0.25	27.6	4.45	0.18	0.54	7.51	8.04	0.54	2.06	2.59	—	24,614	24,614	0.38	3.96	1.21	25,804
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.11	0.15	2.26	0.00	0.00	0.69	0.69	0.00	0.16	0.16	—	621	621	0.01	0.02	0.78	629
Vendor	0.04	0.01	1.14	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,274	1,274	0.02	0.19	0.96	1,333
Hauling	0.58	0.18	19.1	3.14	0.13	0.38	5.25	5.63	0.38	1.44	1.82	—	17,435	17,435	0.27	2.80	14.2	18,291
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.41	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	0.13	104
Vendor	0.01	< 0.005	0.21	0.04	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	211	211	< 0.005	0.03	0.16	221
Hauling	0.11	0.03	3.49	0.57	0.02	0.07	0.96	1.03	0.07	0.26	0.33	—	2,887	2,887	0.04	0.46	2.35	3,028

3.13. Dam Facilities - Saddle Dams (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.14. Dam Facilities - Saddle Dams (2028) - Mitigated

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	5.52	5.19	32.1	214	0.38	1.17	—	1.17	1.13	—	1.13	—	40,105	40,105	1.63	0.33	—	40,243
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.52	5.19	32.1	214	0.38	1.17	—	1.17	1.13	—	1.13	—	40,105	40,105	1.63	0.33	—	40,243
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.53	1.44	8.93	59.4	0.10	0.32	—	0.32	0.31	—	0.31	—	11,145	11,145	0.45	0.09	—	11,183
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	0.28	0.26	1.63	10.8	0.02	0.06	—	0.06	0.06	—	0.06	—	1,845	1,845	0.07	0.01	—	1,851
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	0.19	0.19	0.18	4.07	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	822	822	0.01	0.03	2.66	834
Vendor	0.10	0.06	3.21	0.62	0.03	0.06	1.07	1.13	0.06	0.30	0.35	—	3,602	3,602	0.06	0.54	7.68	3,771
Hauling	0.37	0.12	12.1	2.04	0.08	0.24	3.34	3.58	0.24	0.91	1.15	—	11,540	11,540	0.17	1.84	24.7	12,116
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.24	2.76	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	733	733	0.01	0.03	0.07	742
Vendor	0.10	0.06	3.41	0.63	0.03	0.06	1.07	1.13	0.06	0.30	0.35	—	3,602	3,602	0.06	0.54	0.20	3,764
Hauling	0.36	0.11	13.0	2.06	0.08	0.24	3.34	3.58	0.24	0.91	1.15	—	11,542	11,542	0.17	1.84	0.64	12,094
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.84	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	210	210	< 0.005	0.01	0.32	213
Vendor	0.03	0.02	0.93	0.17	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,001	1,001	0.02	0.15	0.92	1,047
Hauling	0.10	0.03	3.53	0.57	0.02	0.07	0.92	0.98	0.07	0.25	0.32	—	3,207	3,207	0.05	0.51	2.96	3,363
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34.8	34.8	< 0.005	< 0.005	0.05	35.2
Vendor	< 0.005	< 0.005	0.17	0.03	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	166	166	< 0.005	0.02	0.15	173
Hauling	0.02	0.01	0.64	0.10	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	531	531	0.01	0.08	0.49	557

3.15. Dam Facilities - Saddle Dams (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.16. Dam Facilities - Saddle Dams (2029) - Mitigated

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	5.51	5.19	32.1	214	0.38	1.16	—	1.16	1.13	—	1.13	—	40,113	40,113	1.63	0.33	—	40,250
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.51	5.19	32.1	214	0.38	1.16	—	1.16	1.13	—	1.13	—	40,113	40,113	1.63	0.33	—	40,250
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.71	22.9	153	0.27	0.83	—	0.83	0.81	—	0.81	—	28,652	28,652	1.16	0.23	—	28,750
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.68	4.19	27.8	0.05	0.15	—	0.15	0.15	—	0.15	—	4,744	4,744	0.19	0.04	—	4,760
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	0.18	0.15	0.18	3.79	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	807	807	0.01	0.03	2.38	818
Vendor	0.10	0.04	3.04	0.60	0.03	0.06	1.07	1.13	0.06	0.30	0.35	—	3,503	3,503	0.06	0.54	6.79	3,671
Hauling	0.37	0.12	11.8	1.96	0.08	0.24	3.34	3.58	0.24	0.91	1.15	—	11,237	11,237	0.17	1.76	22.7	11,788
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.14	0.21	2.58	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	719	719	0.01	0.03	0.06	728
Vendor	0.09	0.04	3.24	0.60	0.03	0.06	1.07	1.13	0.06	0.30	0.35	—	3,503	3,503	0.06	0.54	0.18	3,665
Hauling	0.36	0.11	12.6	1.98	0.08	0.24	3.34	3.58	0.24	0.91	1.15	—	11,239	11,239	0.17	1.76	0.59	11,768
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.15	2.01	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	530	530	< 0.005	0.02	0.74	537
Vendor	0.07	0.03	2.27	0.43	0.02	0.04	0.75	0.79	0.04	0.21	0.25	—	2,502	2,502	0.04	0.38	2.09	2,620
Hauling	0.26	0.08	8.79	1.40	0.06	0.17	2.35	2.52	0.17	0.65	0.82	—	8,027	8,027	0.12	1.26	7.00	8,412
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.37	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	87.7	87.7	< 0.005	< 0.005	0.12	88.9
Vendor	0.01	< 0.005	0.41	0.08	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	414	414	0.01	0.06	0.35	434
Hauling	0.05	0.01	1.61	0.26	0.01	0.03	0.43	0.46	0.03	0.12	0.15	—	1,329	1,329	0.02	0.21	1.16	1,393

3.17. Dam Facilities - Saddle Dams (2030) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.18. Dam Facilities - Saddle Dams (2030) - Mitigated

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	5.52	5.19	32.1	214	0.38	1.17	—	1.17	1.13	—	1.13	—	40,114	40,114	1.63	0.33	—	40,252
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.52	5.19	32.1	214	0.38	1.17	—	1.17	1.13	—	1.13	—	40,114	40,114	1.63	0.33	—	40,252
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.94	3.71	23.0	153	0.27	0.83	—	0.83	0.81	—	0.81	—	28,653	28,653	1.16	0.23	—	28,751
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.68	4.19	27.8	0.05	0.15	—	0.15	0.15	—	0.15	—	4,744	4,744	0.19	0.04	—	4,760
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	0.17	0.15	0.15	3.54	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	791	791	0.01	< 0.005	2.12	794
Vendor	0.10	0.04	2.89	0.57	0.03	0.06	1.07	1.13	0.06	0.30	0.35	—	3,398	3,398	0.06	0.51	5.95	3,556
Hauling	0.37	0.12	11.4	1.96	0.08	0.24	3.34	3.58	0.24	0.91	1.15	—	10,937	10,937	0.17	1.76	20.7	11,486
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.13	0.18	2.40	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	705	705	0.01	0.03	0.05	714
Vendor	0.09	0.03	3.10	0.54	0.03	0.06	1.07	1.13	0.06	0.30	0.35	—	3,398	3,398	0.06	0.51	0.15	3,551
Hauling	0.36	0.11	12.3	1.98	0.08	0.24	3.34	3.58	0.24	0.91	1.15	—	10,939	10,939	0.17	1.76	0.54	11,468
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.13	1.89	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	519	519	< 0.005	0.02	0.66	526
Vendor	0.07	0.03	2.17	0.41	0.02	0.04	0.75	0.79	0.04	0.21	0.25	—	2,427	2,427	0.04	0.36	1.83	2,538
Hauling	0.26	0.08	8.56	1.41	0.06	0.17	2.35	2.52	0.17	0.65	0.82	—	7,813	7,813	0.12	1.26	6.37	8,197
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.34	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	86.0	86.0	< 0.005	< 0.005	0.11	87.1
Vendor	0.01	< 0.005	0.40	0.07	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	402	402	0.01	0.06	0.30	420
Hauling	0.05	0.01	1.56	0.26	0.01	0.03	0.43	0.46	0.03	0.12	0.15	—	1,294	1,294	0.02	0.21	1.05	1,357

3.19. Dam Facilities - Saddle Dams (2031) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.20. Dam Facilities - Saddle Dams (2031) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.51	5.19	32.1	214	0.38	1.16	—	1.16	1.13	—	1.13	—	40,113	40,113	1.63	0.33	—	40,251
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.11	0.69	4.60	0.01	0.03	—	0.03	0.02	—	0.02	—	863	863	0.04	0.01	—	866
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	0.02	0.02	0.13	0.84	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	143	143	0.01	< 0.005	—	143
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.18	2.25	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	694	694	0.01	0.03	0.05	703
Vendor	0.09	0.03	2.96	0.52	0.03	0.06	1.07	1.13	0.03	0.30	0.32	—	3,289	3,289	0.03	0.48	0.13	3,433
Hauling	0.28	0.11	11.9	1.90	0.08	0.24	3.34	3.58	0.24	0.91	1.15	—	10,648	10,648	0.17	1.68	0.48	11,153

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.4	15.4	< 0.005	< 0.005	0.02	15.6
Vendor	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70.8	70.8	< 0.005	0.01	0.05	73.9
Hauling	0.01	< 0.005	0.25	0.04	< 0.005	0.01	0.07	0.08	0.01	0.02	0.02	—	229	229	< 0.005	0.04	0.17	240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.55	2.55	< 0.005	< 0.005	< 0.005	2.58
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	0.01	12.2
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37.9	37.9	< 0.005	0.01	0.03	39.8

3.21. Dam Facilities - Outlet Works (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.22. Dam Facilities - Outlet Works (2028) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.39	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.6	51.6	< 0.005	< 0.005	—	51.8
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	0.01	0.01	0.07	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.55	8.55	< 0.005	< 0.005	—	8.58
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	56.4	56.4	< 0.005	< 0.005	0.01	57.1
Vendor	0.03	0.02	1.00	0.19	0.01	0.02	0.31	0.33	0.02	0.09	0.10	—	1,059	1,059	0.02	0.16	0.06	1,107
Hauling	0.02	0.01	0.81	0.13	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	721	721	0.01	0.11	0.04	756
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	—	9.78	9.78	< 0.005	< 0.005	0.01	9.91
Vendor	< 0.005	< 0.005	0.17	0.03	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	178	178	< 0.005	0.03	0.16	186
Hauling	< 0.005	< 0.005	0.13	0.02	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	121	121	< 0.005	0.02	0.11	127
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.62	1.62	< 0.005	< 0.005	< 0.005	1.64
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.5	29.5	< 0.005	< 0.005	0.03	30.9
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.1	20.1	< 0.005	< 0.005	0.02	21.1

3.23. Dam Facilities - Outlet Works (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.24. Dam Facilities - Outlet Works (2029) - Mitigated

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	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	306	306	0.01	< 0.005	—	308
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	306	306	0.01	< 0.005	—	308
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.67	0.90	< 0.005	0.06	—	0.06	0.06	—	0.06	—	219	219	0.01	< 0.005	—	220
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	0.05	0.04	0.30	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	36.2	36.2	< 0.005	< 0.005	—	36.4
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	0.01	0.01	0.01	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	62.1	62.1	< 0.005	< 0.005	0.18	62.9
Vendor	0.03	0.01	0.89	0.18	0.01	0.02	0.31	0.33	0.02	0.09	0.10	—	1,030	1,030	0.02	0.16	2.00	1,080
Hauling	0.02	0.01	0.74	0.12	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	702	702	0.01	0.11	1.42	737
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.20	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.3	55.3	< 0.005	< 0.005	< 0.005	56.0
Vendor	0.03	0.01	0.95	0.18	0.01	0.02	0.31	0.33	0.02	0.09	0.10	—	1,030	1,030	0.02	0.16	0.05	1,078
Hauling	0.02	0.01	0.79	0.12	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	702	702	0.01	0.11	0.04	736
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.8	40.8	< 0.005	< 0.005	0.06	41.3
Vendor	0.02	0.01	0.67	0.13	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	736	736	0.01	0.11	0.62	770
Hauling	0.02	0.01	0.55	0.09	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	502	502	0.01	0.08	0.44	526
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.75	6.75	< 0.005	< 0.005	0.01	6.83
Vendor	< 0.005	< 0.005	0.12	0.02	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.10	128
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	83.1	83.1	< 0.005	0.01	0.07	87.0

3.25. Dam Facilities - Outlet Works (2030) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.26. Dam Facilities - Outlet Works (2030) - Mitigated

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	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	0.89	0.48	< 0.005	0.03	—	0.03	0.03	—	0.03	—	116	116	< 0.005	< 0.005	—	117
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	0.03	0.02	0.16	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	19.3	19.3	< 0.005	< 0.005	—	19.4
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	0.01	0.01	0.01	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.8	60.8	< 0.005	< 0.005	0.16	61.1
Vendor	0.03	0.01	0.85	0.17	0.01	0.02	0.31	0.33	0.02	0.09	0.10	—	999	999	0.02	0.15	1.75	1,046
Hauling	0.02	0.01	0.71	0.12	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	684	684	0.01	0.11	1.29	718
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.2	54.2	< 0.005	< 0.005	< 0.005	54.9
Vendor	0.03	0.01	0.91	0.16	0.01	0.02	0.31	0.33	0.02	0.09	0.10	—	999	999	0.02	0.15	0.05	1,044
Hauling	0.02	0.01	0.77	0.12	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	684	684	0.01	0.11	0.03	717
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.03	21.5
Vendor	0.01	< 0.005	0.34	0.06	< 0.005	0.01	0.12	0.12	0.01	0.03	0.04	—	379	379	0.01	0.06	0.29	397
Hauling	0.01	< 0.005	0.28	0.05	< 0.005	0.01	0.08	0.08	0.01	0.02	0.03	—	260	260	< 0.005	0.04	0.21	272
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.52	3.52	< 0.005	< 0.005	< 0.005	3.56
Vendor	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	62.8	62.8	< 0.005	0.01	0.05	65.7
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	43.0	43.0	< 0.005	0.01	0.04	45.1

3.27. Utilities - Transmission Lines (to be scaled) (2026) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.28. Utilities - Transmission Lines (to be scaled) (2026) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.04	11.0	117	0.19	0.42	—	0.42	0.42	—	0.42	—	20,098	20,098	0.82	0.16	—	20,167
Dust From Material Movement	—	—	—	—	—	—	7.42	7.42	—	3.39	3.39	—	—	—	—	—	—	—

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	0.58	6.20	0.01	0.02	—	0.02	0.02	—	0.02	—	1,062	1,062	0.04	0.01	—	1,066
Dust From Material Movement	—	—	—	—	—	—	0.39	0.39	—	0.18	0.18	—	—	—	—	—	—	—
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	0.11	1.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	176	176	0.01	< 0.005	—	176
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.19	2.11	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	489	489	0.01	0.02	0.05	495
Vendor	0.04	0.02	1.35	0.25	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,332	1,332	0.02	0.20	0.09	1,392
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.7	26.7	< 0.005	< 0.005	0.05	27.0
Vendor	< 0.005	< 0.005	0.07	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70.4	70.4	< 0.005	0.01	0.08	73.6
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	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.41	4.41	< 0.005	< 0.005	0.01	4.47
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.7	11.7	< 0.005	< 0.005	0.01	12.2
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

3.29. Utilities - Transmission Lines (to be scaled) (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.30. Utilities - Transmission Lines (to be scaled) (2027) - Mitigated

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	2.07	2.04	11.0	117	0.19	0.42	—	0.42	0.42	—	0.42	—	20,098	20,098	0.82	0.16	—	20,167
Dust From Material Movement	—	—	—	—	—	—	7.42	7.42	—	3.39	3.39	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.04	11.0	117	0.19	0.42	—	0.42	0.42	—	0.42	—	20,098	20,098	0.82	0.16	—	20,167
Dust From Material Movement	—	—	—	—	—	—	7.42	7.42	—	3.39	3.39	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.48	1.46	7.85	83.8	0.13	0.30	—	0.30	0.30	—	0.30	—	14,356	14,356	0.58	0.12	—	14,405
Dust From Material Movement	—	—	—	—	—	—	5.30	5.30	—	2.42	2.42	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.27	1.43	15.3	0.02	0.05	—	0.05	0.05	—	0.05	—	2,377	2,377	0.10	0.02	—	2,385
Dust From Material Movement	—	—	—	—	—	—	0.97	0.97	—	0.44	0.44	—	—	—	—	—	—	—
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	0.14	0.12	0.13	2.80	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	538	538	< 0.005	0.02	1.88	545
Vendor	0.04	0.02	1.19	0.24	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,304	1,304	0.02	0.19	3.06	1,364
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.17	1.90	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	479	479	0.01	0.02	0.05	485
Vendor	0.04	0.02	1.28	0.24	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,304	1,304	0.02	0.19	0.08	1,361
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.11	1.49	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	353	353	< 0.005	0.01	0.58	357

Vendor	0.03	0.02	0.89	0.17	0.01	0.01	0.27	0.28	0.01	0.07	0.09	—	931	931	0.01	0.14	0.95	973
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	0.02	0.01	0.02	0.27	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	58.4	58.4	< 0.005	< 0.005	0.10	59.2
Vendor	0.01	< 0.005	0.16	0.03	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	154	154	< 0.005	0.02	0.16	161
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

3.31. Utilities - Transmission Lines (to be scaled) (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.32. Utilities - Transmission Lines (to be scaled) (2028) - Mitigated

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	2.07	2.04	11.0	117	0.19	0.42	—	0.42	0.42	—	0.42	—	20,098	20,098	0.82	0.16	—	20,167
Dust From Material Movement	—	—	—	—	—	—	7.42	7.42	—	3.39	3.39	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	2.04	11.0	117	0.19	0.42	—	0.42	0.42	—	0.42	—	20,098	20,098	0.82	0.16	—	20,167
Dust From Material Movement	—	—	—	—	—	—	7.42	7.42	—	3.39	3.39	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.46	7.87	84.0	0.13	0.30	—	0.30	0.30	—	0.30	—	14,395	14,395	0.58	0.12	—	14,445

Dust From Material Movement	—	—	—	—	—	—	5.32	5.32	—	2.43	2.43	—	—	—	—	—	—	—
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	0.27	0.27	1.44	15.3	0.02	0.06	—	0.06	0.05	—	0.05	—	2,383	2,383	0.10	0.02	—	2,391
Dust From Material Movement	—	—	—	—	—	—	0.97	0.97	—	0.44	0.44	—	—	—	—	—	—	—
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	0.12	0.12	0.12	2.61	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	527	527	< 0.005	0.02	1.70	534
Vendor	0.03	0.02	1.13	0.22	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,271	1,271	0.02	0.19	2.71	1,331
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.15	1.77	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	470	470	0.01	0.02	0.04	475
Vendor	0.03	0.02	1.21	0.22	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,271	1,271	0.02	0.19	0.07	1,328
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.10	1.39	0.00	0.00	0.37	0.37	0.00	0.09	0.09	—	347	347	< 0.005	0.01	0.53	351
Vendor	0.02	0.02	0.85	0.16	0.01	0.01	0.27	0.28	0.01	0.07	0.09	—	911	911	0.01	0.14	0.84	952

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	0.01	0.01	0.02	0.25	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	57.4	57.4	< 0.005	< 0.005	0.09	58.2
Vendor	< 0.005	< 0.005	0.15	0.03	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	151	151	< 0.005	0.02	0.14	158
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

3.33. Utilities - Transmission Lines (to be scaled) (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.34. Utilities - Transmission Lines (to be scaled) (2029) - Mitigated

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 Equipm ent	2.07	2.04	11.0	117	0.19	0.42	—	0.42	0.42	—	0.42	—	20,098	20,098	0.82	0.16	—	20,167
Dust From Material Mover	—	—	—	—	—	—	7.42	7.42	—	3.39	3.39	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	2.07	2.04	11.0	117	0.19	0.42	—	0.42	0.42	—	0.42	—	20,098	20,098	0.82	0.16	—	20,167
Dust From Material Mover	—	—	—	—	—	—	7.42	7.42	—	3.39	3.39	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.02	1.00	5.40	57.6	0.09	0.21	—	0.21	0.21	—	0.21	—	9,872	9,872	0.40	0.08	—	9,906

Dust From Material Movement	—	—	—	—	—	—	3.65	3.65	—	1.67	1.67	—	—	—	—	—	—	—
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	0.19	0.18	0.99	10.5	0.02	0.04	—	0.04	0.04	—	0.04	—	1,634	1,634	0.07	0.01	—	1,640
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.30	0.30	—	—	—	—	—	—	—
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	0.12	0.10	0.11	2.43	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	517	517	< 0.005	0.02	1.53	524
Vendor	0.03	0.01	1.07	0.21	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,236	1,236	0.02	0.19	2.40	1,296
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.13	1.65	0.00	0.00	0.53	0.53	0.00	0.12	0.12	—	461	461	< 0.005	0.02	0.04	467
Vendor	0.03	0.01	1.14	0.21	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,236	1,236	0.02	0.19	0.06	1,294
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.89	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	234	234	< 0.005	0.01	0.32	237
Vendor	0.02	0.01	0.55	0.10	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	607	607	0.01	0.09	0.51	636

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	0.01	0.01	0.01	0.16	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	38.7	38.7	< 0.005	< 0.005	0.05	39.2
Vendor	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	101	101	< 0.005	0.02	0.08	105
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

3.35. Conveyance - Open Cut Trench (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.36. Conveyance - Open Cut Trench (2028) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	2.00	1.73	13.6	28.5	0.06	0.46	—	0.46	0.43	—	0.43	—	5,499	5,499	0.22	0.04	—	5,518
Dust From Material Mover	—	—	—	—	—	—	1.36	1.36	—	0.67	0.67	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.01	0.01	0.05	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.5	21.5	< 0.005	< 0.005	—	21.6
Dust From Material Mover	—	—	—	—	—	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.56	3.56	< 0.005	< 0.005	—	3.58

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.05	0.57	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	150	150	< 0.005	0.01	0.01	152
Vendor	0.04	0.03	1.61	0.30	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,695	1,695	0.03	0.25	0.09	1,771
Hauling	0.31	0.10	11.1	1.76	0.07	0.20	2.85	3.05	0.20	0.78	0.98	—	9,858	9,858	0.14	1.57	0.55	10,330
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	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.61
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.63	6.63	< 0.005	< 0.005	0.01	6.94
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.6	38.6	< 0.005	0.01	0.04	40.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.10	1.10	< 0.005	< 0.005	< 0.005	1.15
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.39	6.39	< 0.005	< 0.005	0.01	6.70

3.37. Conveyance - Open Cut Trench (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.38. Conveyance - Open Cut Trench (2029) - Mitigated

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	2.00	1.73	13.5	28.5	0.06	0.46	—	0.46	0.43	—	0.43	—	5,497	5,497	0.22	0.04	—	5,516
Dust From Material Movement	—	—	—	—	—	—	1.36	1.36	—	0.67	0.67	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.00	1.73	13.5	28.5	0.06	0.46	—	0.46	0.43	—	0.43	—	5,497	5,497	0.22	0.04	—	5,516
Dust From Material Movement	—	—	—	—	—	—	1.36	1.36	—	0.67	0.67	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.37	2.94	6.18	0.01	0.10	—	0.10	0.09	—	0.09	—	1,194	1,194	0.05	0.01	—	1,198
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.15	0.15	—	—	—	—	—	—	—
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	0.08	0.07	0.54	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	198	198	0.01	< 0.005	—	198
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.78	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	166	166	< 0.005	0.01	0.49	168
Vendor	0.04	0.02	1.43	0.28	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,648	1,648	0.03	0.25	3.20	1,728
Hauling	0.31	0.10	10.1	1.67	0.07	0.20	2.85	3.05	0.20	0.78	0.98	—	9,598	9,598	0.14	1.50	19.4	10,069
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.53	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.01	149
Vendor	0.04	0.02	1.53	0.28	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,649	1,649	0.03	0.25	0.08	1,725
Hauling	0.31	0.10	10.7	1.69	0.07	0.20	2.85	3.05	0.20	0.78	0.98	—	9,600	9,600	0.14	1.50	0.50	10,052
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.0	33.0	< 0.005	< 0.005	0.05	33.5
Vendor	0.01	< 0.005	0.33	0.06	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	358	358	0.01	0.05	0.30	375
Hauling	0.07	0.02	2.28	0.36	0.01	0.04	0.61	0.66	0.04	0.17	0.21	—	2,085	2,085	0.03	0.33	1.82	2,185
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.47	5.47	< 0.005	< 0.005	0.01	5.54
Vendor	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	59.3	59.3	< 0.005	0.01	0.05	62.1
Hauling	0.01	< 0.005	0.42	0.07	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	345	345	0.01	0.05	0.30	362

3.39. Tunneling - Outlet and Conveyance (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.40. Tunneling - Outlet and Conveyance (2028) - Mitigated

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	0.91	0.79	5.44	16.3	0.03	0.20	—	0.20	0.19	—	0.19	—	3,257	3,257	0.13	0.03	—	3,268
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Architectural Coatings	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.79	5.44	16.3	0.03	0.20	—	0.20	0.19	—	0.19	—	3,257	3,257	0.13	0.03	—	3,268
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.26	1.81	5.43	0.01	0.07	—	0.07	0.06	—	0.06	—	1,083	1,083	0.04	0.01	—	1,087
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.06	0.05	0.33	0.99	< 0.005	0.01	—	0.01	0.01	—	0.01	—	179	179	0.01	< 0.005	—	180
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.03	0.03	0.03	0.73	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	148	148	< 0.005	0.01	0.48	150
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.50	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	132	132	< 0.005	0.01	0.01	133
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.1	45.1	< 0.005	< 0.005	0.07	45.7
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.47	7.47	< 0.005	< 0.005	0.01	7.57
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

3.41. Tunneling - Outlet and Conveyance (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.42. Tunneling - Outlet and Conveyance (2029) - Mitigated

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 Equipm ent	0.91	0.79	5.44	16.3	0.03	0.20	—	0.20	0.19	—	0.19	—	3,259	3,259	0.13	0.03	—	3,271
Dust From Material Movemer	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architect ural Coating s	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.91	0.79	5.44	16.3	0.03	0.20	—	0.20	0.19	—	0.19	—	3,259	3,259	0.13	0.03	—	3,271
Dust From Material Movemer	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architect ural Coating s	< 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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.57	3.88	11.7	0.02	0.15	—	0.15	0.14	—	0.14	—	2,328	2,328	0.09	0.02	—	2,336
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.12	0.10	0.71	2.13	< 0.005	0.03	—	0.03	0.03	—	0.03	—	385	385	0.02	< 0.005	—	387
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.03	0.03	0.03	0.68	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	145	145	< 0.005	0.01	0.43	147
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.04	0.46	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	129	129	< 0.005	0.01	0.01	131
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.36	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	95.1	95.1	< 0.005	< 0.005	0.13	96.3
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	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.7	15.7	< 0.005	< 0.005	0.02	15.9
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

3.43. Tunneling - Outlet and Conveyance (2030) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

3.44. Tunneling - Outlet and Conveyance (2030) - Mitigated

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	0.91	0.79	5.44	16.3	0.03	0.20	—	0.20	0.19	—	0.19	—	3,260	3,260	0.13	0.03	—	3,271
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.91	0.79	5.44	16.3	0.03	0.20	—	0.20	0.19	—	0.19	—	3,260	3,260	0.13	0.03	—	3,271
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.57	3.89	11.7	0.02	0.15	—	0.15	0.14	—	0.14	—	2,328	2,328	0.09	0.02	—	2,336
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.12	0.10	0.71	2.13	< 0.005	0.03	—	0.03	0.03	—	0.03	—	385	385	0.02	< 0.005	—	387
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Architectural	< 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	0.03	0.03	0.03	0.64	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	142	142	< 0.005	< 0.005	0.38	143
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.43	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	127	127	< 0.005	0.01	0.01	128
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.34	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.2	93.2	< 0.005	< 0.005	0.12	94.4
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	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.4	15.4	< 0.005	< 0.005	0.02	15.6
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

3.45. Tunneling - Outlet and Conveyance (2031) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.46. Tunneling - Outlet and Conveyance (2031) - Mitigated

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	0.91	0.79	5.44	16.3	0.03	0.20	—	0.20	0.19	—	0.19	—	3,260	3,260	0.13	0.03	—	3,271
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Architect Coatings	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.91	0.79	5.44	16.3	0.03	0.20	—	0.20	0.19	—	0.19	—	3,260	3,260	0.13	0.03	—	3,271
Dust From Material Movemer	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architect ural Coating s	< 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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.32	0.28	1.91	5.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,142	1,142	0.05	0.01	—	1,146
Dust From Material Movemer	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architect ural Coating s	< 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	0.06	0.05	0.35	1.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	189	189	0.01	< 0.005	—	190
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.03	0.02	0.02	0.60	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	140	140	< 0.005	< 0.005	0.34	140
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.40	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	125	125	< 0.005	0.01	0.01	126
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.0	45.0	< 0.005	< 0.005	0.05	45.6
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.45	7.45	< 0.005	< 0.005	0.01	7.55
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

3.47. Outlet Works PTs (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.48. Outlet Works PTs (2028) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.20	2.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	400	400	0.02	< 0.005	—	401
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	67.3	67.3	< 0.005	< 0.005	—	67.6
Dust From Material Movement	—	—	—	—	—	—	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	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.1	11.1	< 0.005	< 0.005	—	11.2
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	56.4	56.4	< 0.005	< 0.005	0.01	57.1
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
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	—	9.78	9.78	< 0.005	< 0.005	0.01	9.91
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	—	1.62	1.62	< 0.005	< 0.005	< 0.005	1.64
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

3.49. Outlet Works PTs (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.50. Outlet Works PTs (2029) - Mitigated

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	0.04	0.04	0.20	2.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	400	400	0.02	< 0.005	—	401
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.04	0.20	2.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	400	400	0.02	< 0.005	—	401
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.14	2.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Dust From Material Movement	—	—	—	—	—	—	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	0.03	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.3	47.3	< 0.005	< 0.005	—	47.5
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.01	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	62.1	62.1	< 0.005	< 0.005	0.18	62.9
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.20	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.3	55.3	< 0.005	< 0.005	< 0.005	56.0
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.8	40.8	< 0.005	< 0.005	0.06	41.3
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.75	6.75	< 0.005	< 0.005	0.01	6.83
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

3.51. Outlet Works PTs (2030) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

3.52. Outlet Works PTs (2030) - Mitigated

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	0.04	0.04	0.20	2.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	400	400	0.02	< 0.005	—	401
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.20	2.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	400	400	0.02	< 0.005	—	401

Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.14	2.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	286	286	0.01	< 0.005	—	287
Dust From Material Movement	—	—	—	—	—	—	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	0.03	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.3	47.3	< 0.005	< 0.005	—	47.5
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.01	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.8	60.8	< 0.005	< 0.005	0.16	61.1
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.2	54.2	< 0.005	< 0.005	< 0.005	54.9
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.9	39.9	< 0.005	< 0.005	0.05	40.5
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.61	6.61	< 0.005	< 0.005	0.01	6.70
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

3.53. Outlet Works PTs (2031) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

3.54. Outlet Works PTs (2031) - Mitigated

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	0.04	0.04	0.20	2.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	400	400	0.02	< 0.005	—	401
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.20	2.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	400	400	0.02	< 0.005	—	401

Dust From Material Mover	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.14	1.98	< 0.005	0.01	—	0.01	0.01	—	0.01	—	283	283	0.01	< 0.005	—	284
Dust From Material Mover	—	—	—	—	—	—	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	0.03	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.8	46.8	< 0.005	< 0.005	—	47.0
Dust From Material Mover	—	—	—	—	—	—	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	0.01	0.01	0.01	0.26	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.9	59.9	< 0.005	< 0.005	0.14	60.1
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.4	53.4	< 0.005	< 0.005	< 0.005	54.1
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.9	38.9	< 0.005	< 0.005	0.04	39.4
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	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.44	6.44	< 0.005	< 0.005	0.01	6.52
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

3.55. Open Cut Trench PTs (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

3.56. Open Cut Trench PTs (2028) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.30	4.21	0.01	0.01	—	0.01	0.01	—	0.01	—	600	600	0.02	< 0.005	—	602
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.35	2.35	< 0.005	< 0.005	—	2.36
Dust From Material Movement	—	—	—	—	—	—	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	—	0.39	0.39	< 0.005	< 0.005	—	0.39
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.28	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.2	75.2	< 0.005	< 0.005	0.01	76.1
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
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	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.31
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	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
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

3.57. Open Cut Trench PTs (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.58. Open Cut Trench PTs (2029) - Mitigated

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	0.06	0.06	0.30	4.21	0.01	0.01	—	0.01	0.01	—	0.01	—	600	600	0.02	< 0.005	—	602
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.30	4.21	0.01	0.01	—	0.01	0.01	—	0.01	—	600	600	0.02	< 0.005	—	602
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.21	3.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	429	429	0.02	< 0.005	—	430

Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.04	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	71.0	71.0	< 0.005	< 0.005	—	71.2
Dust From Material Movement	—	—	—	—	—	—	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	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.8	82.8	< 0.005	< 0.005	0.24	83.9
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.26	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	73.8	73.8	< 0.005	< 0.005	0.01	74.7
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.3	54.3	< 0.005	< 0.005	0.08	55.0
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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.00	9.00	< 0.005	< 0.005	0.01	9.11
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

3.59. Open Cut Trench PTs (2030) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.60. Open Cut Trench PTs (2030) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.06	0.06	0.30	4.21	0.01	0.01	—	0.01	0.01	—	0.01	—	600	600	0.02	< 0.005	—	602
Dust From Material Mover	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.01	0.01	0.03	0.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.4	63.4	< 0.005	< 0.005	—	63.6
Dust From Material Mover	—	—	—	—	—	—	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 Equipm ent	< 0.005	< 0.005	0.01	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5

Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.25	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	72.3	72.3	< 0.005	< 0.005	0.01	73.2
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.88	7.88	< 0.005	< 0.005	0.01	7.98
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	—	1.30	1.30	< 0.005	< 0.005	< 0.005	1.32
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

3.61. Transmission Lines PTs (2026) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.62. Transmission Lines PTs (2026) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	0.79	11.2	0.01	0.03	—	0.03	0.03	—	0.03	—	1,602	1,602	0.06	0.01	—	1,608

Dust From Material Mover	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	84.7	84.7	< 0.005	< 0.005	—	84.9
Dust From Material Mover	—	—	—	—	—	—	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	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.0	14.0	< 0.005	< 0.005	—	14.1
Dust From Material Mover	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.10	1.10	0.00	0.00	0.28	0.28	0.00	0.06	0.06	—	254	254	< 0.005	0.01	0.03	257

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	0.02	14.0
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	—	2.30	2.30	< 0.005	< 0.005	< 0.005	2.33
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

3.63. Transmission Lines PTs (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.64. Transmission Lines PTs (2027) - Mitigated

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	0.15	0.15	0.79	11.2	0.01	0.03	—	0.03	0.03	—	0.03	—	1,602	1,602	0.06	0.01	—	1,607
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	0.79	11.2	0.01	0.03	—	0.03	0.03	—	0.03	—	1,602	1,602	0.06	0.01	—	1,607
Dust From Material Movement	—	—	—	—	—	—	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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	0.56	8.03	0.01	0.02	—	0.02	0.02	—	0.02	—	1,144	1,144	0.05	0.01	—	1,148
Dust From Material Movement	—	—	—	—	—	—	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	0.02	0.02	0.10	1.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	189	189	0.01	< 0.005	—	190
Dust From Material Movement	—	—	—	—	—	—	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	0.07	0.06	0.07	1.46	0.00	0.00	0.28	0.28	0.00	0.06	0.06	—	280	280	< 0.005	0.01	0.98	283
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.09	0.99	0.00	0.00	0.28	0.28	0.00	0.06	0.06	—	249	249	< 0.005	0.01	0.03	252
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.06	0.77	0.00	0.00	0.19	0.19	0.00	0.05	0.05	—	183	183	< 0.005	0.01	0.30	186
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	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	30.4	30.4	< 0.005	< 0.005	0.05	30.8
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

3.65. Transmission Lines PTs (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.66. Transmission Lines PTs (2028) - Mitigated

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	0.15	0.15	0.79	11.2	0.01	0.03	—	0.03	0.03	—	0.03	—	1,600	1,600	0.06	0.01	—	1,606
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	0.79	11.2	0.01	0.03	—	0.03	0.03	—	0.03	—	1,600	1,600	0.06	0.01	—	1,606
Dust From Material Movement	—	—	—	—	—	—	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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	0.57	8.05	0.01	0.02	—	0.02	0.02	—	0.02	—	1,146	1,146	0.05	0.01	—	1,150
Dust From Material Movement	—	—	—	—	—	—	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	0.02	0.02	0.10	1.47	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	190	190	0.01	< 0.005	—	190
Dust From Material Movement	—	—	—	—	—	—	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	0.06	0.06	0.06	1.36	0.00	0.00	0.28	0.28	0.00	0.06	0.06	—	274	274	< 0.005	0.01	0.89	278
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.08	0.92	0.00	0.00	0.28	0.28	0.00	0.06	0.06	—	244	244	< 0.005	0.01	0.02	247
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.05	0.72	0.00	0.00	0.19	0.19	0.00	0.05	0.05	—	180	180	< 0.005	0.01	0.27	183
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	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	29.9	29.9	< 0.005	< 0.005	0.05	30.3
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

3.67. Transmission Lines PTs (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.68. Transmission Lines PTs (2029) - Mitigated

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	0.15	0.15	0.79	11.2	0.01	0.03	—	0.03	0.03	—	0.03	—	1,600	1,600	0.06	0.01	—	1,606
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	0.79	11.2	0.01	0.03	—	0.03	0.03	—	0.03	—	1,600	1,600	0.06	0.01	—	1,606
Dust From Material Movement	—	—	—	—	—	—	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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.38	5.45	0.01	0.01	—	0.01	0.01	—	0.01	—	777	777	0.03	0.01	—	779
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.07	1.00	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	129	129	0.01	< 0.005	—	129
Dust From Material Movement	—	—	—	—	—	—	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	0.06	0.05	0.06	1.26	0.00	0.00	0.28	0.28	0.00	0.06	0.06	—	269	269	< 0.005	0.01	0.79	273
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.86	0.00	0.00	0.28	0.28	0.00	0.06	0.06	—	240	240	< 0.005	0.01	0.02	243
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.46	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.17	122
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	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	19.9	19.9	< 0.005	< 0.005	0.03	20.1
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

3.69. Roadway - Grading and Paving (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.70. Roadway - Grading and Paving (2028) - Mitigated

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	0.79	0.79	9.64	47.4	0.07	0.14	—	0.14	0.14	—	0.14	—	7,525	7,525	0.31	0.06	—	7,551
Dust From Material Movement	—	—	—	—	—	—	1.04	1.04	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.79	9.64	47.4	0.07	0.14	—	0.14	0.14	—	0.14	—	7,525	7,525	0.31	0.06	—	7,551
Dust From Material Movement	—	—	—	—	—	—	1.04	1.04	—	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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.46	5.58	27.5	0.04	0.08	—	0.08	0.08	—	0.08	—	4,359	4,359	0.18	0.04	—	4,374
Dust From Material Movement	—	—	—	—	—	—	0.60	0.60	—	0.06	0.06	—	—	—	—	—	—	—
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	0.08	0.08	1.02	5.02	0.01	0.01	—	0.01	0.01	—	0.01	—	722	722	0.03	0.01	—	724
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	1.04	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	211	211	< 0.005	0.01	0.68	214
Vendor	0.06	0.04	1.89	0.37	0.02	0.03	0.63	0.66	0.03	0.17	0.21	—	2,119	2,119	0.03	0.32	4.52	2,218
Hauling	0.05	0.02	1.77	0.30	0.01	0.03	0.49	0.52	0.03	0.13	0.17	—	1,683	1,683	0.02	0.27	3.61	1,767
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.06	0.71	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	188	188	< 0.005	0.01	0.02	190
Vendor	0.06	0.04	2.01	0.37	0.02	0.03	0.63	0.66	0.03	0.17	0.21	—	2,119	2,119	0.03	0.32	0.12	2,214

Hauling	0.05	0.02	1.89	0.30	0.01	0.03	0.49	0.52	0.03	0.13	0.17	—	1,683	1,683	0.02	0.27	0.09	1,764
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.45	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	112	112	< 0.005	< 0.005	0.17	114
Vendor	0.03	0.02	1.14	0.21	0.01	0.02	0.36	0.38	0.02	0.10	0.12	—	1,227	1,227	0.02	0.18	1.13	1,283
Hauling	0.03	0.01	1.07	0.17	0.01	0.02	0.28	0.30	0.02	0.08	0.10	—	975	975	0.01	0.16	0.90	1,022
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.6	18.6	< 0.005	< 0.005	0.03	18.8
Vendor	0.01	< 0.005	0.21	0.04	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	203	203	< 0.005	0.03	0.19	212
Hauling	0.01	< 0.005	0.20	0.03	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	161	161	< 0.005	0.03	0.15	169

3.71. Roadway - Grading and Paving (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.72. Roadway - Grading and Paving (2029) - Mitigated

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	0.79	0.79	9.64	47.4	0.07	0.14	—	0.14	0.14	—	0.14	—	7,523	7,523	0.31	0.06	—	7,549
Dust From Material Movement	—	—	—	—	—	—	1.04	1.04	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.79	9.64	47.4	0.07	0.14	—	0.14	0.14	—	0.14	—	7,523	7,523	0.31	0.06	—	7,549
Dust From Material Movement	—	—	—	—	—	—	1.04	1.04	—	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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.30	3.60	17.7	0.03	0.05	—	0.05	0.05	—	0.05	—	2,812	2,812	0.11	0.02	—	2,822
Dust From Material Movement	—	—	—	—	—	—	0.39	0.39	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.66	3.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	466	466	0.02	< 0.005	—	467
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.97	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	207	207	< 0.005	0.01	0.61	210
Vendor	0.06	0.02	1.79	0.35	0.02	0.03	0.63	0.66	0.03	0.17	0.21	—	2,060	2,060	0.03	0.32	4.00	2,159
Hauling	0.05	0.02	1.72	0.29	0.01	0.03	0.49	0.52	0.03	0.13	0.17	—	1,639	1,639	0.02	0.26	3.31	1,719
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.66	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	184	184	< 0.005	0.01	0.02	187
Vendor	0.06	0.02	1.91	0.35	0.02	0.03	0.63	0.66	0.03	0.17	0.21	—	2,061	2,061	0.03	0.32	0.10	2,156

Hauling	0.05	0.02	1.83	0.29	0.01	0.03	0.49	0.52	0.03	0.13	0.17	—	1,639	1,639	0.02	0.26	0.09	1,716
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.27	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	71.1	71.1	< 0.005	< 0.005	0.10	72.0
Vendor	0.02	0.01	0.70	0.13	0.01	0.01	0.23	0.24	0.01	0.06	0.08	—	770	770	0.01	0.12	0.64	806
Hauling	0.02	0.01	0.67	0.11	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	613	613	0.01	0.10	0.53	642
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.8	11.8	< 0.005	< 0.005	0.02	11.9
Vendor	< 0.005	< 0.005	0.13	0.02	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	128	128	< 0.005	0.02	0.11	134
Hauling	< 0.005	< 0.005	0.12	0.02	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	101	101	< 0.005	0.02	0.09	106

3.73. Dam Facilities - Spillway (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.74. Dam Facilities - Spillway (2028) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.26	4.49	5.58	0.01	0.06	—	0.06	0.05	—	0.05	—	862	862	0.03	0.01	—	865
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.76	0.94	< 0.005	0.01	—	0.01	0.01	—	0.01	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	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 Equipm ent	0.01	0.01	0.14	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movemer	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.28	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.2	75.2	< 0.005	< 0.005	0.01	76.1
Vendor	0.02	0.01	0.60	0.11	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	636	636	0.01	0.09	0.04	664
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
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	—	13.0	13.0	< 0.005	< 0.005	0.02	13.2
Vendor	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	< 0.005	0.02	0.10	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.16	2.16	< 0.005	< 0.005	< 0.005	2.19
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.02	18.5
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

3.75. Dam Facilities - Spillway (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.76. Dam Facilities - Spillway (2029) - Mitigated

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	0.29	0.26	4.49	5.58	0.01	0.06	—	0.06	0.05	—	0.05	—	863	863	0.03	0.01	—	866
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.26	4.49	5.58	0.01	0.06	—	0.06	0.05	—	0.05	—	863	863	0.03	0.01	—	866
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.19	3.20	3.98	0.01	0.04	—	0.04	0.04	—	0.04	—	616	616	0.02	< 0.005	—	618
Dust From Material Movement	—	—	—	—	—	—	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	0.04	0.03	0.58	0.73	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	< 0.005	< 0.005	—	102

Dust From Material Mover	—	—	—	—	—	—	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	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.8	82.8	< 0.005	< 0.005	0.24	83.9
Vendor	0.02	0.01	0.54	0.11	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	618	618	0.01	0.09	1.20	648
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.26	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	73.8	73.8	< 0.005	< 0.005	0.01	74.7
Vendor	0.02	0.01	0.57	0.11	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	618	618	0.01	0.09	0.03	647
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.3	54.3	< 0.005	< 0.005	0.08	55.0
Vendor	0.01	< 0.005	0.40	0.08	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	442	442	0.01	0.07	0.37	462
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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.00	9.00	< 0.005	< 0.005	0.01	9.11
Vendor	< 0.005	< 0.005	0.07	0.01	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	73.1	73.1	< 0.005	0.01	0.06	76.5
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

3.77. Dam Facilities - Spillway (2030) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.78. Dam Facilities - Spillway (2030) - Mitigated

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	0.29	0.26	4.49	5.58	0.01	0.06	—	0.06	0.05	—	0.05	—	863	863	0.04	0.01	—	866

Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.26	4.49	5.58	0.01	0.06	—	0.06	0.05	—	0.05	—	863	863	0.04	0.01	—	866
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.19	3.20	3.98	0.01	0.04	—	0.04	0.04	—	0.04	—	616	616	0.03	0.01	—	618
Dust From Material Movement	—	—	—	—	—	—	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	0.04	0.03	0.58	0.73	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	< 0.005	< 0.005	—	102

Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.1	81.1	< 0.005	< 0.005	0.22	81.4
Vendor	0.02	0.01	0.51	0.10	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	600	600	0.01	0.09	1.05	628
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.25	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	72.3	72.3	< 0.005	< 0.005	0.01	73.2
Vendor	0.02	0.01	0.55	0.10	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	600	600	0.01	0.09	0.03	627
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.19	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.3	53.3	< 0.005	< 0.005	0.07	54.0
Vendor	0.01	< 0.005	0.38	0.07	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	428	428	0.01	0.06	0.32	448
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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.82	8.82	< 0.005	< 0.005	0.01	8.93
Vendor	< 0.005	< 0.005	0.07	0.01	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	70.9	70.9	< 0.005	0.01	0.05	74.2
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

3.79. Dam Facilities - Spillway (2031) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.80. Dam Facilities - Spillway (2031) - Mitigated

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	0.29	0.26	4.49	5.58	0.01	0.06	—	0.06	0.05	—	0.05	—	863	863	0.03	0.01	—	866

Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.26	4.49	5.58	0.01	0.06	—	0.06	0.05	—	0.05	—	863	863	0.03	0.01	—	866
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	1.20	1.50	< 0.005	0.01	—	0.01	0.01	—	0.01	—	231	231	0.01	< 0.005	—	232
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.22	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.3	38.3	< 0.005	< 0.005	—	38.4

Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.34	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.8	79.8	< 0.005	< 0.005	0.19	80.1
Vendor	0.02	0.01	0.49	0.09	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	580	580	0.01	0.08	0.90	607
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.23	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	71.2	71.2	< 0.005	< 0.005	0.01	72.1
Vendor	0.02	0.01	0.52	0.09	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	580	580	0.01	0.08	0.02	606
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	19.7	19.7	< 0.005	< 0.005	0.02	19.9
Vendor	< 0.005	< 0.005	0.14	0.02	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	156	156	< 0.005	0.02	0.10	163
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	—	3.26	3.26	< 0.005	< 0.005	< 0.005	3.30
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.8	25.8	< 0.005	< 0.005	0.02	26.9
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

3.81. Dam Facilities - Site Restoration (2031) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.82. Dam Facilities - Site Restoration (2031) - Mitigated

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	1.18	1.03	7.05	27.9	0.04	0.27	—	0.27	0.25	—	0.25	—	4,266	4,266	0.17	0.03	—	4,281

Dust From Material Mover	—	—	—	—	—	—	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 Equipment	0.26	0.23	1.55	6.12	0.01	0.06	—	0.06	0.05	—	0.05	—	935	935	0.04	0.01	—	938
Dust From Material Mover	—	—	—	—	—	—	0.23	0.23	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.28	1.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	155	155	0.01	< 0.005	—	155
Dust From Material Mover	—	—	—	—	—	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.85	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	200	200	< 0.005	< 0.005	0.48	200

Vendor	0.01	< 0.005	0.32	0.06	< 0.005	0.01	0.13	0.13	< 0.005	0.03	0.04	—	387	387	< 0.005	0.06	0.60	404
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	0.01	0.01	0.14	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	40.2	40.2	< 0.005	< 0.005	0.05	40.8
Vendor	< 0.005	< 0.005	0.07	0.01	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	84.8	84.8	< 0.005	0.01	0.06	88.6
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.66	6.66	< 0.005	< 0.005	0.01	6.75
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	0.01	14.7
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

3.83. Utilities - Petroleum Pipeline (2026) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.84. Utilities - Petroleum Pipeline (2026) - Mitigated

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	1.38	1.36	14.9	79.6	0.12	0.25	—	0.25	0.25	—	0.25	—	12,370	12,370	0.50	0.10	—	12,412
Dust From Material Movement	—	—	—	—	—	—	6.39	6.39	—	3.28	3.28	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.38	1.36	14.9	79.6	0.12	0.25	—	0.25	0.25	—	0.25	—	12,370	12,370	0.50	0.10	—	12,412
Dust From Material Movement	—	—	—	—	—	—	6.39	6.39	—	3.28	3.28	—	—	—	—	—	—	—

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.45	0.45	4.90	26.2	0.04	0.08	—	0.08	0.08	—	0.08	—	4,067	4,067	0.16	0.03	—	4,081
Dust From Material Movemer	—	—	—	—	—	—	2.10	2.10	—	1.08	1.08	—	—	—	—	—	—	—
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 Equipm ent	0.08	0.08	0.89	4.77	0.01	0.02	—	0.02	0.02	—	0.02	—	673	673	0.03	0.01	—	676
Dust From Material Movemer	—	—	—	—	—	—	0.38	0.38	—	0.20	0.20	—	—	—	—	—	—	—
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	0.19	0.22	4.58	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	813	813	0.01	0.03	3.07	825
Vendor	0.02	0.01	0.63	0.13	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	666	666	0.01	0.10	1.73	698
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.17	0.28	3.12	0.00	0.00	0.78	0.78	0.00	0.18	0.18	—	724	724	0.01	0.03	0.08	733

Vendor	0.02	0.01	0.67	0.13	< 0.005	0.01	0.19	0.20	0.01	0.05	0.06	—	666	666	0.01	0.10	0.04	696
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	1.12	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	246	246	< 0.005	0.01	0.44	249
Vendor	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	219	219	< 0.005	0.03	0.24	229
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	0.01	0.01	0.01	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	40.6	40.6	< 0.005	< 0.005	0.07	41.2
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.3	36.3	< 0.005	0.01	0.04	37.9
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

3.85. Pumping Plant (2028) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.86. Pumping Plant (2028) - Mitigated

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	2.55	2.42	18.2	101	0.18	0.52	—	0.52	0.51	—	0.51	—	19,157	19,157	0.78	0.16	—	19,222
Dust From Material Movement	—	—	—	—	—	—	6.91	6.91	—	3.34	3.34	—	—	—	—	—	—	—
Architectural Coatings	0.23	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.55	2.42	18.2	101	0.18	0.52	—	0.52	0.51	—	0.51	—	19,157	19,157	0.78	0.16	—	19,222
Dust From Material Movement	—	—	—	—	—	—	6.91	6.91	—	3.34	3.34	—	—	—	—	—	—	—

Architect Coatings	0.23	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.94	7.06	39.1	0.07	0.20	—	0.20	0.20	—	0.20	—	7,423	7,423	0.30	0.06	—	7,448
Dust From Material Movement	—	—	—	—	—	—	2.68	2.68	—	1.29	1.29	—	—	—	—	—	—	—
Architectural Coatings	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.18	0.17	1.29	7.14	0.01	0.04	—	0.04	0.04	—	0.04	—	1,229	1,229	0.05	0.01	—	1,233
Dust From Material Movement	—	—	—	—	—	—	0.49	0.49	—	0.24	0.24	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.19	0.18	4.07	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	822	822	0.01	0.03	2.66	834
Vendor	0.01	< 0.005	0.19	0.04	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	212	212	< 0.005	0.03	0.45	222
Hauling	0.05	0.01	1.52	0.25	0.01	0.03	0.42	0.45	0.03	0.11	0.14	—	1,442	1,442	0.02	0.23	3.09	1,515
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.24	2.76	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	733	733	0.01	0.03	0.07	742
Vendor	0.01	< 0.005	0.20	0.04	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	212	212	< 0.005	0.03	0.01	221
Hauling	0.05	0.01	1.62	0.26	0.01	0.03	0.42	0.45	0.03	0.11	0.14	—	1,443	1,443	0.02	0.23	0.08	1,512
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	1.17	0.00	0.00	0.32	0.32	0.00	0.07	0.07	—	293	293	< 0.005	0.01	0.44	297
Vendor	< 0.005	< 0.005	0.08	0.01	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	82.1	82.1	< 0.005	0.01	0.08	85.9
Hauling	0.02	0.01	0.62	0.10	< 0.005	0.01	0.16	0.17	0.01	0.04	0.06	—	559	559	0.01	0.09	0.52	586
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	48.5	48.5	< 0.005	< 0.005	0.07	49.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	0.01	14.2
Hauling	< 0.005	< 0.005	0.11	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	92.5	92.5	< 0.005	0.01	0.09	97.1

3.87. Pumping Plant (2029) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

3.88. Pumping Plant (2029) - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.55	2.42	18.2	101	0.18	0.52	—	0.52	0.51	—	0.51	—	19,156	19,156	0.78	0.16	—	19,222
Dust From Material Movement	—	—	—	—	—	—	6.91	6.91	—	3.34	3.34	—	—	—	—	—	—	—

Architect Coatings	0.23	0.23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.39	2.96	16.4	0.03	0.08	—	0.08	0.08	—	0.08	—	3,111	3,111	0.13	0.03	—	3,122
Dust From Material Movement	—	—	—	—	—	—	1.12	1.12	—	0.54	0.54	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.54	2.99	0.01	0.02	—	0.02	0.02	—	0.02	—	515	515	0.02	< 0.005	—	517
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.10	0.10	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.14	0.21	2.58	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	719	719	0.01	0.03	0.06	728
Vendor	0.01	< 0.005	0.19	0.04	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	206	206	< 0.005	0.03	0.01	216
Hauling	0.05	0.01	1.57	0.25	0.01	0.03	0.42	0.45	0.03	0.11	0.14	—	1,405	1,405	0.02	0.22	0.07	1,471
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.46	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.17	122
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	33.5	33.5	< 0.005	0.01	0.03	35.0
Hauling	0.01	< 0.005	0.25	0.04	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	228	228	< 0.005	0.04	0.20	239
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	19.9	19.9	< 0.005	< 0.005	0.03	20.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.54	5.54	< 0.005	< 0.005	< 0.005	5.80
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37.8	37.8	< 0.005	0.01	0.03	39.6

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.1.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.68	0.63	0.59	5.85	0.01	0.01	1.44	1.45	0.01	0.37	0.38	—	1,521	1,521	0.05	0.07	3.15	1,545
Total	0.68	0.63	0.59	5.85	0.01	0.01	1.44	1.45	0.01	0.37	0.38	—	1,521	1,521	0.05	0.07	3.15	1,545
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.63	0.58	0.67	4.85	0.01	0.01	1.44	1.45	0.01	0.37	0.38	—	1,399	1,399	0.05	0.07	0.08	1,422
Total	0.63	0.58	0.67	4.85	0.01	0.01	1.44	1.45	0.01	0.37	0.38	—	1,399	1,399	0.05	0.07	0.08	1,422
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.12	0.11	0.12	0.90	< 0.005	< 0.005	0.26	0.26	< 0.005	0.07	0.07	—	237	237	0.01	0.01	0.23	241

Total	0.12	0.11	0.12	0.90	< 0.005	< 0.005	0.26	0.26	< 0.005	0.07	0.07	—	237	237	0.01	0.01	0.23	241

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

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

4.2.2. Electricity Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	52,924	52,924	20.6	29.5	—	62,215
Total	—	—	—	—	—	—	—	—	—	—	—	—	52,924	52,924	20.6	29.5	—	62,215

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	52,924	52,924	20.6	29.5	—	62,215
Total	—	—	—	—	—	—	—	—	—	—	—	—	52,924	52,924	20.6	29.5	—	62,215
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	8,762	8,762	3.41	4.88	—	10,300
Total	—	—	—	—	—	—	—	—	—	—	—	—	8,762	8,762	3.41	4.88	—	10,300

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

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

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2,051	2,051	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2,051	2,051	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2,051	2,051	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2,051	2,051	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	374	374	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	374	374	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.5.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refriger Warehouse No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.6.2. Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

Equipm ent Type	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. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	5,762	5,762	—	—	—	5,762
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,762	5,762	—	—	—	5,762
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	5,762	5,762	—	—	—	5,762

Total	—	—	—	—	—	—	—	—	—	—	—	—	5,762	5,762	—	—	—	5,762
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	954	954	—	—	—	954
Total	—	—	—	—	—	—	—	—	—	—	—	—	954	954	—	—	—	954

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	2,392	2,392	—	—	—	2,392
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,392	2,392	—	—	—	2,392
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	2,392	2,392	—	—	—	2,392
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,392	2,392	—	—	—	2,392
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	396	396	—	—	—	396
Total	—	—	—	—	—	—	—	—	—	—	—	—	396	396	—	—	—	396

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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
Roadway - Excavation	Site Preparation	6/5/2027	3/11/2028	5.00	200	—
Dam Facilities - Site Preparation	Site Preparation	4/22/2028	10/7/2028	5.00	120	—
Dam Facilities - Main Dam	Site Preparation	10/7/2028	12/28/2030	5.00	580	—
Dam Facilities - Saddle Dams	Site Preparation	8/12/2028	1/11/2031	5.00	630	—
Dam Facilities - Outlet Works	Site Preparation	10/7/2028	7/13/2030	5.00	460	—
Utilities - Transmission Lines (to be scaled)	Site Preparation	12/5/2026	9/8/2029	5.00	720	—
Conveyance - Open Cut Trench	Site Preparation	12/30/2028	4/21/2029	5.00	80.0	—
Tunneling - Outlet and Conveyance	Site Preparation	7/15/2028	6/28/2031	5.00	770	—
Outlet Works PTs	Site Preparation	10/7/2028	12/27/2031	5.00	840	—
Open Cut Trench PTs	Site Preparation	12/30/2028	2/23/2030	5.00	300	—
Transmission Lines PTs	Site Preparation	12/5/2026	9/5/2029	5.00	718	—
Roadway - Grading and Paving	Grading	3/11/2028	7/10/2029	5.00	347	—
Dam Facilities - Spillway	Grading	10/7/2028	5/17/2031	5.00	680	—
Dam Facilities - Site Restoration	Grading	5/17/2031	9/6/2031	5.00	80.0	—
Utilities - Petroleum Pipeline	Grading	1/3/2026	6/20/2026	5.00	120	—
Pumping Plant	Grading	6/17/2028	3/24/2029	5.00	200	—

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
Roadway - Excavation	Excavators	Diesel	Average	8.00	10.0	36.0	0.38
Roadway - Excavation	Off-Highway Trucks	Diesel	Average	8.00	10.0	376	0.38
Roadway - Excavation	Rubber Tired Dozers	Diesel	Average	8.00	10.0	367	0.40
Roadway - Excavation	Scrapers	Diesel	Average	4.00	10.0	423	0.48
Roadway - Excavation	Tractors/Loaders/Back hoes	Diesel	Average	6.00	5.00	84.0	0.37
Roadway - Excavation	Dumpers/Tenders	Diesel	Average	8.00	10.0	16.0	0.38
Dam Facilities - Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	20.0	16.0	0.38
Dam Facilities - Site Preparation	Graders	Diesel	Average	1.00	20.0	148	0.41
Dam Facilities - Site Preparation	Off-Highway Trucks	Diesel	Average	3.00	20.0	376	0.38
Dam Facilities - Site Preparation	Other Construction Equipment	Diesel	Average	1.00	20.0	82.0	0.42
Dam Facilities - Site Preparation	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	20.0	367	0.40
Dam Facilities - Site Preparation	Scrapers	Diesel	Average	1.00	20.0	423	0.48
Dam Facilities - Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	2.00	20.0	84.0	0.37
Dam Facilities - Main Dam	Excavators	Diesel	Average	1.00	20.0	36.0	0.38
Dam Facilities - Main Dam	Off-Highway Trucks	Diesel	Average	9.00	20.0	376	0.38

Dam Facilities - Main Dam	Other Construction Equipment	Diesel	Average	3.00	20.0	82.0	0.42
Dam Facilities - Main Dam	Plate Compactors	Diesel	Average	6.00	20.0	8.00	0.43
Dam Facilities - Main Dam	Rubber Tired Dozers	Diesel	Average	6.00	20.0	367	0.40
Dam Facilities - Main Dam	Scrapers	Diesel	Average	6.00	20.0	423	0.48
Dam Facilities - Main Dam	Tractors/Loaders/Back hoes	Diesel	Average	2.00	20.0	84.0	0.37
Dam Facilities - Main Dam	Dumpers/Tenders	Diesel	Average	4.00	20.0	16.0	0.38
Dam Facilities - Saddle Dams	Excavators	Diesel	Average	1.00	20.0	36.0	0.38
Dam Facilities - Saddle Dams	Off-Highway Trucks	Diesel	Average	9.00	20.0	376	0.38
Dam Facilities - Saddle Dams	Other Construction Equipment	Diesel	Average	3.00	20.0	82.0	0.42
Dam Facilities - Saddle Dams	Tractors/Loaders/Back hoes	Diesel	Average	8.00	20.0	84.0	0.37
Dam Facilities - Saddle Dams	Dumpers/Tenders	Diesel	Average	10.0	20.0	16.0	0.38
Dam Facilities - Outlet Works	Dumpers/Tenders	Diesel	Average	2.00	20.0	16.0	0.38
Utilities - Transmission Lines (to be scaled)	Bore/Drill Rigs	Diesel	Average	2.00	8.00	367	0.40
Utilities - Transmission Lines (to be scaled)	Cranes	Diesel	Average	5.00	8.00	367	0.29
Utilities - Transmission Lines (to be scaled)	Dumpers/Tenders	Diesel	Average	2.00	10.0	16.0	0.38
Utilities - Transmission Lines (to be scaled)	Graders	Diesel	Average	4.00	10.0	148	0.41
Utilities - Transmission Lines (to be scaled)	Other Construction Equipment	Diesel	Average	15.0	10.0	82.0	0.42

Utilities - Transmission Lines (to be scaled)	Rubber Tired Dozers	Diesel	Average	2.00	10.0	367	0.40
Conveyance - Open Cut Trench	Cranes	Diesel	Average	1.00	6.00	367	0.29
Conveyance - Open Cut Trench	Dumpers/Tenders	Diesel	Average	14.0	10.0	16.0	0.38
Conveyance - Open Cut Trench	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
Conveyance - Open Cut Trench	Off-Highway Trucks	Diesel	Average	1.00	10.0	376	0.38
Conveyance - Open Cut Trench	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Conveyance - Open Cut Trench	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40
Conveyance - Open Cut Trench	Tractors/Loaders/Back hoes	Diesel	Average	2.00	10.0	84.0	0.37
Tunneling - Outlet and Conveyance	Bore/Drill Rigs	Diesel	Average	1.00	10.0	367	0.40
Tunneling - Outlet and Conveyance	Cranes	Diesel	Average	1.00	6.00	367	0.29
Tunneling - Outlet and Conveyance	Dumpers/Tenders	Diesel	Average	7.00	10.0	16.0	0.38
Tunneling - Outlet and Conveyance	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Outlet Works PTs	Other Construction Equipment	Diesel	Average	2.00	5.00	82.0	0.42
Open Cut Trench PTs	Other Construction Equipment	Diesel	Average	3.00	5.00	82.0	0.42
Transmission Lines PTs	Other Construction Equipment	Diesel	Average	10.0	4.00	82.0	0.42
Roadway - Grading and Paving	Cranes	Diesel	Average	1.00	20.0	367	0.29
Roadway - Grading and Paving	Graders	Diesel	Average	2.00	20.0	148	0.41

Roadway - Grading and Paving	Pavers	Diesel	Average	1.00	20.0	81.0	0.42
Roadway - Grading and Paving	Rollers	Diesel	Average	4.00	20.0	36.0	0.38
Dam Facilities - Spillway	Dumpers/Tenders	Diesel	Average	1.00	20.0	16.0	0.38
Dam Facilities - Spillway	Excavators	Diesel	Average	2.00	20.0	36.0	0.38
Dam Facilities - Site Restoration	Dumpers/Tenders	Diesel	Average	4.00	20.0	16.0	0.38
Dam Facilities - Site Restoration	Graders	Diesel	Average	2.00	20.0	148	0.41
Dam Facilities - Site Restoration	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Restoration	Tractors/Loaders/Back hoes	Diesel	Average	1.00	20.0	84.0	0.37
Utilities - Petroleum Pipeline	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
Utilities - Petroleum Pipeline	Other Construction Equipment	Diesel	Average	8.00	10.0	82.0	0.42
Utilities - Petroleum Pipeline	Other Material Handling Equipment	Diesel	Average	6.00	10.0	93.0	0.40
Utilities - Petroleum Pipeline	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
Utilities - Petroleum Pipeline	Rubber Tired Dozers	Diesel	Average	2.00	10.0	367	0.40
Utilities - Petroleum Pipeline	Tractors/Loaders/Back hoes	Diesel	Average	2.00	10.0	84.0	0.37
Utilities - Petroleum Pipeline	Welders	Diesel	Average	6.00	10.0	46.0	0.45
Utilities - Petroleum Pipeline	Plate Compactors	Diesel	Average	2.00	10.0	8.00	0.43
Pumping Plant	Cranes	Diesel	Average	2.00	6.00	367	0.29
Pumping Plant	Dumpers/Tenders	Diesel	Average	8.00	10.0	16.0	0.38

Pumping Plant	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
Pumping Plant	Graders	Diesel	Average	2.00	10.0	148	0.41
Pumping Plant	Off-Highway Trucks	Diesel	Average	6.00	10.0	376	0.38
Pumping Plant	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
Pumping Plant	Rollers	Diesel	Average	4.00	10.0	36.0	0.38
Pumping Plant	Rubber Tired Dozers	Diesel	Average	2.00	10.0	367	0.40
Pumping Plant	Tractors/Loaders/Back hoes	Diesel	Average	4.00	5.00	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Roadway - Excavation	Excavators	Diesel	Tier 4 Final	8.00	10.0	36.0	0.38
Roadway - Excavation	Off-Highway Trucks	Diesel	Tier 4 Final	8.00	10.0	376	0.38
Roadway - Excavation	Rubber Tired Dozers	Diesel	Tier 4 Final	8.00	10.0	367	0.40
Roadway - Excavation	Scrapers	Diesel	Tier 4 Final	4.00	10.0	423	0.48
Roadway - Excavation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	6.00	5.00	84.0	0.37
Roadway - Excavation	Dumpers/Tenders	Diesel	Average	8.00	10.0	16.0	0.38
Dam Facilities - Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	20.0	16.0	0.38
Dam Facilities - Site Preparation	Graders	Diesel	Tier 4 Final	1.00	20.0	148	0.41
Dam Facilities - Site Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	20.0	376	0.38
Dam Facilities - Site Preparation	Other Construction Equipment	Diesel	Tier 4 Final	1.00	20.0	82.0	0.42
Dam Facilities - Site Preparation	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	20.0	367	0.40

Dam Facilities - Site Preparation	Scrapers	Diesel	Tier 4 Final	1.00	20.0	423	0.48
Dam Facilities - Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	20.0	84.0	0.37
Dam Facilities - Main Dam	Excavators	Diesel	Tier 4 Final	1.00	20.0	36.0	0.38
Dam Facilities - Main Dam	Off-Highway Trucks	Diesel	Tier 4 Final	9.00	20.0	376	0.38
Dam Facilities - Main Dam	Other Construction Equipment	Diesel	Tier 4 Final	3.00	20.0	82.0	0.42
Dam Facilities - Main Dam	Plate Compactors	Diesel	Average	6.00	20.0	8.00	0.43
Dam Facilities - Main Dam	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	20.0	367	0.40
Dam Facilities - Main Dam	Scrapers	Diesel	Tier 4 Final	6.00	20.0	423	0.48
Dam Facilities - Main Dam	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	20.0	84.0	0.37
Dam Facilities - Main Dam	Dumpers/Tenders	Diesel	Average	4.00	20.0	16.0	0.38
Dam Facilities - Saddle Dams	Excavators	Diesel	Tier 4 Final	1.00	20.0	36.0	0.38
Dam Facilities - Saddle Dams	Off-Highway Trucks	Diesel	Tier 4 Final	9.00	20.0	376	0.38
Dam Facilities - Saddle Dams	Other Construction Equipment	Diesel	Tier 4 Final	3.00	20.0	82.0	0.42
Dam Facilities - Saddle Dams	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	8.00	20.0	84.0	0.37
Dam Facilities - Saddle Dams	Dumpers/Tenders	Diesel	Average	10.0	20.0	16.0	0.38
Dam Facilities - Outlet Works	Dumpers/Tenders	Diesel	Average	2.00	20.0	16.0	0.38
Utilities - Transmission Lines (to be scaled)	Bore/Drill Rigs	Diesel	Tier 4 Final	2.00	8.00	367	0.40

Utilities - Transmission Lines (to be scaled)	Cranes	Diesel	Tier 4 Final	5.00	8.00	367	0.29
Utilities - Transmission Lines (to be scaled)	Dumpers/Tenders	Diesel	Average	2.00	10.0	16.0	0.38
Utilities - Transmission Lines (to be scaled)	Graders	Diesel	Tier 4 Final	4.00	10.0	148	0.41
Utilities - Transmission Lines (to be scaled)	Other Construction Equipment	Diesel	Tier 4 Final	15.0	10.0	82.0	0.42
Utilities - Transmission Lines (to be scaled)	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	10.0	367	0.40
Conveyance - Open Cut Trench	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Conveyance - Open Cut Trench	Dumpers/Tenders	Diesel	Average	14.0	10.0	16.0	0.38
Conveyance - Open Cut Trench	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
Conveyance - Open Cut Trench	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	376	0.38
Conveyance - Open Cut Trench	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Conveyance - Open Cut Trench	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	4.00	367	0.40
Conveyance - Open Cut Trench	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
Tunneling - Outlet and Conveyance	Bore/Drill Rigs	Diesel	Tier 4 Final	1.00	10.0	367	0.40
Tunneling - Outlet and Conveyance	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Tunneling - Outlet and Conveyance	Dumpers/Tenders	Diesel	Average	7.00	10.0	16.0	0.38
Tunneling - Outlet and Conveyance	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Outlet Works PTs	Other Construction Equipment	Diesel	Tier 4 Final	2.00	5.00	82.0	0.42

Open Cut Trench PTs	Other Construction Equipment	Diesel	Tier 4 Final	3.00	5.00	82.0	0.42
Transmission Lines PTs	Other Construction Equipment	Diesel	Tier 4 Final	10.0	4.00	82.0	0.42
Roadway - Grading and Paving	Cranes	Diesel	Tier 4 Final	1.00	20.0	367	0.29
Roadway - Grading and Paving	Graders	Diesel	Tier 4 Final	2.00	20.0	148	0.41
Roadway - Grading and Paving	Pavers	Diesel	Tier 4 Final	1.00	20.0	81.0	0.42
Roadway - Grading and Paving	Rollers	Diesel	Tier 4 Final	4.00	20.0	36.0	0.38
Dam Facilities - Spillway	Dumpers/Tenders	Diesel	Average	1.00	20.0	16.0	0.38
Dam Facilities - Spillway	Excavators	Diesel	Tier 4 Final	2.00	20.0	36.0	0.38
Dam Facilities - Site Restoration	Dumpers/Tenders	Diesel	Average	4.00	20.0	16.0	0.38
Dam Facilities - Site Restoration	Graders	Diesel	Tier 4 Final	2.00	20.0	148	0.41
Dam Facilities - Site Restoration	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Restoration	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.00	20.0	84.0	0.37
Utilities - Petroleum Pipeline	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
Utilities - Petroleum Pipeline	Other Construction Equipment	Diesel	Tier 4 Final	8.00	10.0	82.0	0.42
Utilities - Petroleum Pipeline	Other Material Handling Equipment	Diesel	Tier 4 Final	6.00	10.0	93.0	0.40
Utilities - Petroleum Pipeline	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42
Utilities - Petroleum Pipeline	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	10.0	367	0.40

Utilities - Petroleum Pipeline	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
Utilities - Petroleum Pipeline	Welders	Diesel	Tier 4 Final	6.00	10.0	46.0	0.45
Utilities - Petroleum Pipeline	Plate Compactors	Diesel	Average	2.00	10.0	8.00	0.43
Pumping Plant	Cranes	Diesel	Tier 4 Final	2.00	6.00	367	0.29
Pumping Plant	Dumpers/Tenders	Diesel	Average	8.00	10.0	16.0	0.38
Pumping Plant	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
Pumping Plant	Graders	Diesel	Tier 4 Final	2.00	10.0	148	0.41
Pumping Plant	Off-Highway Trucks	Diesel	Tier 4 Final	6.00	10.0	376	0.38
Pumping Plant	Pavers	Diesel	Tier 4 Final	1.00	10.0	81.0	0.42
Pumping Plant	Rollers	Diesel	Tier 4 Final	4.00	10.0	36.0	0.38
Pumping Plant	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	10.0	367	0.40
Pumping Plant	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	5.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Roadway - Excavation	—	—	—	—
Roadway - Excavation	Worker	53.0	30.0	LDA,LDT1,LDT2
Roadway - Excavation	Vendor	0.00	75.0	HHDT,MHDT
Roadway - Excavation	Hauling	7.00	75.0	HHDT
Roadway - Excavation	Onsite truck	—	—	HHDT
Utilities - Transmission Lines (to be scaled)	—	—	—	—
Utilities - Transmission Lines (to be scaled)	Worker	25.0	30.0	LDA,LDT1,LDT2

Utilities - Transmission Lines (to be scaled)	Vendor	6.00	75.0	HHDT,MHDT
Utilities - Transmission Lines (to be scaled)	Hauling	0.00	75.0	HHDT
Utilities - Transmission Lines (to be scaled)	Onsite truck	—	—	HHDT
Dam Facilities - Site Preparation	—	—	—	—
Dam Facilities - Site Preparation	Worker	17.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Site Preparation	Vendor	5.00	75.0	HHDT,MHDT
Dam Facilities - Site Preparation	Hauling	4.00	75.0	HHDT
Dam Facilities - Site Preparation	Onsite truck	—	—	HHDT
Dam Facilities - Main Dam	—	—	—	—
Dam Facilities - Main Dam	Worker	47.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Main Dam	Vendor	9.00	75.0	HHDT,MHDT
Dam Facilities - Main Dam	Hauling	108	75.0	HHDT
Dam Facilities - Main Dam	Onsite truck	—	—	HHDT
Dam Facilities - Saddle Dams	—	—	—	—
Dam Facilities - Saddle Dams	Worker	39.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Saddle Dams	Vendor	17.0	75.0	HHDT,MHDT
Dam Facilities - Saddle Dams	Hauling	48.0	75.0	HHDT
Dam Facilities - Saddle Dams	Onsite truck	—	—	HHDT
Dam Facilities - Outlet Works	—	—	—	—
Dam Facilities - Outlet Works	Worker	3.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Outlet Works	Vendor	5.00	75.0	HHDT,MHDT
Dam Facilities - Outlet Works	Hauling	3.00	75.0	HHDT
Dam Facilities - Outlet Works	Onsite truck	—	—	HHDT
Conveyance - Open Cut Trench	—	—	—	—
Conveyance - Open Cut Trench	Worker	8.00	30.0	LDA,LDT1,LDT2
Conveyance - Open Cut Trench	Vendor	8.00	75.0	HHDT,MHDT

Conveyance - Open Cut Trench	Hauling	41.0	75.0	HHDT
Conveyance - Open Cut Trench	Onsite truck	—	—	HHDT
Tunneling - Outlet and Conveyance	—	—	—	—
Tunneling - Outlet and Conveyance	Worker	7.00	30.0	LDA,LDT1,LDT2
Tunneling - Outlet and Conveyance	Vendor	0.00	75.0	HHDT,MHDT
Tunneling - Outlet and Conveyance	Hauling	0.00	75.0	HHDT
Tunneling - Outlet and Conveyance	Onsite truck	—	—	HHDT
Outlet Works PTs	—	—	—	—
Outlet Works PTs	Worker	3.00	30.0	LDA,LDT1,LDT2
Outlet Works PTs	Vendor	0.00	75.0	HHDT,MHDT
Outlet Works PTs	Hauling	0.00	75.0	HHDT
Outlet Works PTs	Onsite truck	—	—	HHDT
Open Cut Trench PTs	—	—	—	—
Open Cut Trench PTs	Worker	4.00	30.0	LDA,LDT1,LDT2
Open Cut Trench PTs	Vendor	0.00	75.0	HHDT,MHDT
Open Cut Trench PTs	Hauling	0.00	75.0	HHDT
Open Cut Trench PTs	Onsite truck	—	—	HHDT
Transmission Lines PTs	—	—	—	—
Transmission Lines PTs	Worker	13.0	30.0	LDA,LDT1,LDT2
Transmission Lines PTs	Vendor	0.00	75.0	HHDT,MHDT
Transmission Lines PTs	Hauling	0.00	74.0	HHDT
Transmission Lines PTs	Onsite truck	—	—	HHDT
Roadway - Grading and Paving	—	—	—	—
Roadway - Grading and Paving	Worker	10.0	30.0	LDA,LDT1,LDT2
Roadway - Grading and Paving	Vendor	10.0	75.0	HHDT,MHDT
Roadway - Grading and Paving	Hauling	7.00	75.0	HHDT
Roadway - Grading and Paving	Onsite truck	—	—	HHDT
Dam Facilities - Spillway	—	—	—	—

Dam Facilities - Spillway	Worker	4.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Spillway	Vendor	3.00	75.0	HHDT,MHDT
Dam Facilities - Spillway	Hauling	0.00	75.0	HHDT
Dam Facilities - Spillway	Onsite truck	—	—	HHDT
Dam Facilities - Site Restoration	—	—	—	—
Dam Facilities - Site Restoration	Worker	10.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Site Restoration	Vendor	2.00	75.0	HHDT,MHDT
Dam Facilities - Site Restoration	Hauling	0.00	75.0	HHDT
Dam Facilities - Site Restoration	Onsite truck	—	—	HHDT
Utilities - Petroleum Pipeline	—	—	—	—
Utilities - Petroleum Pipeline	Worker	37.0	30.0	LDA,LDT1,LDT2
Utilities - Petroleum Pipeline	Vendor	3.00	75.0	HHDT,MHDT
Utilities - Petroleum Pipeline	Hauling	0.00	75.0	HHDT
Utilities - Petroleum Pipeline	Onsite truck	—	—	HHDT
Pumping Plant	—	—	—	—
Pumping Plant	Worker	39.0	30.0	LDA,LDT1,LDT2
Pumping Plant	Vendor	1.00	75.0	HHDT,MHDT
Pumping Plant	Hauling	6.00	75.0	HHDT
Pumping Plant	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Roadway - Excavation	—	—	—	—
Roadway - Excavation	Worker	53.0	30.0	LDA,LDT1,LDT2
Roadway - Excavation	Vendor	0.00	75.0	HHDT,MHDT
Roadway - Excavation	Hauling	7.00	75.0	HHDT
Roadway - Excavation	Onsite truck	—	—	HHDT

Utilities - Transmission Lines (to be scaled)	—	—	—	—
Utilities - Transmission Lines (to be scaled)	Worker	25.0	30.0	LDA,LDT1,LDT2
Utilities - Transmission Lines (to be scaled)	Vendor	6.00	75.0	HHDT,MHDT
Utilities - Transmission Lines (to be scaled)	Hauling	0.00	75.0	HHDT
Utilities - Transmission Lines (to be scaled)	Onsite truck	—	—	HHDT
Dam Facilities - Site Preparation	—	—	—	—
Dam Facilities - Site Preparation	Worker	17.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Site Preparation	Vendor	5.00	75.0	HHDT,MHDT
Dam Facilities - Site Preparation	Hauling	4.00	75.0	HHDT
Dam Facilities - Site Preparation	Onsite truck	—	—	HHDT
Dam Facilities - Main Dam	—	—	—	—
Dam Facilities - Main Dam	Worker	47.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Main Dam	Vendor	9.00	75.0	HHDT,MHDT
Dam Facilities - Main Dam	Hauling	108	75.0	HHDT
Dam Facilities - Main Dam	Onsite truck	—	—	HHDT
Dam Facilities - Saddle Dams	—	—	—	—
Dam Facilities - Saddle Dams	Worker	39.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Saddle Dams	Vendor	17.0	75.0	HHDT,MHDT
Dam Facilities - Saddle Dams	Hauling	48.0	75.0	HHDT
Dam Facilities - Saddle Dams	Onsite truck	—	—	HHDT
Dam Facilities - Outlet Works	—	—	—	—
Dam Facilities - Outlet Works	Worker	3.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Outlet Works	Vendor	5.00	75.0	HHDT,MHDT
Dam Facilities - Outlet Works	Hauling	3.00	75.0	HHDT
Dam Facilities - Outlet Works	Onsite truck	—	—	HHDT

Conveyance - Open Cut Trench	—	—	—	—
Conveyance - Open Cut Trench	Worker	8.00	30.0	LDA,LDT1,LDT2
Conveyance - Open Cut Trench	Vendor	8.00	75.0	HHDT,MHDT
Conveyance - Open Cut Trench	Hauling	41.0	75.0	HHDT
Conveyance - Open Cut Trench	Onsite truck	—	—	HHDT
Tunneling - Outlet and Conveyance	—	—	—	—
Tunneling - Outlet and Conveyance	Worker	7.00	30.0	LDA,LDT1,LDT2
Tunneling - Outlet and Conveyance	Vendor	0.00	75.0	HHDT,MHDT
Tunneling - Outlet and Conveyance	Hauling	0.00	75.0	HHDT
Tunneling - Outlet and Conveyance	Onsite truck	—	—	HHDT
Outlet Works PTs	—	—	—	—
Outlet Works PTs	Worker	3.00	30.0	LDA,LDT1,LDT2
Outlet Works PTs	Vendor	0.00	75.0	HHDT,MHDT
Outlet Works PTs	Hauling	0.00	75.0	HHDT
Outlet Works PTs	Onsite truck	—	—	HHDT
Open Cut Trench PTs	—	—	—	—
Open Cut Trench PTs	Worker	4.00	30.0	LDA,LDT1,LDT2
Open Cut Trench PTs	Vendor	0.00	75.0	HHDT,MHDT
Open Cut Trench PTs	Hauling	0.00	75.0	HHDT
Open Cut Trench PTs	Onsite truck	—	—	HHDT
Transmission Lines PTs	—	—	—	—
Transmission Lines PTs	Worker	13.0	30.0	LDA,LDT1,LDT2
Transmission Lines PTs	Vendor	0.00	75.0	HHDT,MHDT
Transmission Lines PTs	Hauling	0.00	74.0	HHDT
Transmission Lines PTs	Onsite truck	—	—	HHDT
Roadway - Grading and Paving	—	—	—	—
Roadway - Grading and Paving	Worker	10.0	30.0	LDA,LDT1,LDT2
Roadway - Grading and Paving	Vendor	10.0	75.0	HHDT,MHDT

Roadway - Grading and Paving	Hauling	7.00	75.0	HHDT
Roadway - Grading and Paving	Onsite truck	—	—	HHDT
Dam Facilities - Spillway	—	—	—	—
Dam Facilities - Spillway	Worker	4.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Spillway	Vendor	3.00	75.0	HHDT,MHDT
Dam Facilities - Spillway	Hauling	0.00	75.0	HHDT
Dam Facilities - Spillway	Onsite truck	—	—	HHDT
Dam Facilities - Site Restoration	—	—	—	—
Dam Facilities - Site Restoration	Worker	10.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Site Restoration	Vendor	2.00	75.0	HHDT,MHDT
Dam Facilities - Site Restoration	Hauling	0.00	75.0	HHDT
Dam Facilities - Site Restoration	Onsite truck	—	—	HHDT
Utilities - Petroleum Pipeline	—	—	—	—
Utilities - Petroleum Pipeline	Worker	37.0	30.0	LDA,LDT1,LDT2
Utilities - Petroleum Pipeline	Vendor	3.00	75.0	HHDT,MHDT
Utilities - Petroleum Pipeline	Hauling	0.00	75.0	HHDT
Utilities - Petroleum Pipeline	Onsite truck	—	—	HHDT
Pumping Plant	—	—	—	—
Pumping Plant	Worker	39.0	30.0	LDA,LDT1,LDT2
Pumping Plant	Vendor	1.00	75.0	HHDT,MHDT
Pumping Plant	Hauling	6.00	75.0	HHDT
Pumping Plant	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%

Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

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)
Pumping Plant	0.00	0.00	0.00	9,768	0.00
Tunneling - Outlet and Conveyance	0.00	0.00	0.00	813	0.00

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Roadway - Excavation	0.00	12,044	1,000	0.00	—
Dam Facilities - Site Preparation	4,175	0.00	450	0.00	—
Dam Facilities - Main Dam	624,000	0.00	8,700	0.00	—
Dam Facilities - Saddle Dams	297,000	0.00	0.00	0.00	—
Dam Facilities - Outlet Works	9,240	0.00	0.00	0.00	—
Utilities - Transmission Lines (to be scaled)	0.00	0.00	1,800	0.00	—
Conveyance - Open Cut Trench	0.00	245,000	0.00	0.00	—
Tunneling - Outlet and Conveyance	0.00	0.00	0.00	0.00	—
Outlet Works PTs	0.00	0.00	0.00	0.00	—
Open Cut Trench PTs	0.00	0.00	0.00	0.00	—
Transmission Lines PTs	0.00	0.00	0.00	0.00	—
Roadway - Grading and Paving	0.00	20,956	870	0.00	—

Dam Facilities - Spillway	0.00	0.00	0.00	0.00	—
Dam Facilities - Site Restoration	0.00	0.00	200	0.00	—
Utilities - Petroleum Pipeline	0.00	0.00	0.00	0.00	—
Pumping Plant	6,500	5,300	250	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%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Refrigerated Warehouse-No Rail	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
2026	0.00	609	0.24	0.34
2027	0.00	609	0.24	0.34
2028	0.00	609	0.24	0.34
2029	0.00	609	0.24	0.34
2030	0.00	609	0.24	0.34
2031	0.00	609	0.24	0.34

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Refrigerated Warehouse-No Rail	192	192	192	69,976	2,027	2,027	2,027	739,757

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Refrigerated Warehouse-No Rail	192	192	192	69,976	2,027	2,027	2,027	739,757

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

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)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Refrigerated Warehouse-No Rail	31,705,009	609	0.2373	0.3390	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Refrigerated Warehouse-No Rail	31,705,009	609	0.2373	0.3390	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

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
Grazing	Inceptisols	900	0.00

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Grazing	Inceptisols	900	0.00

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

Grassland	900	0.00

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Grassland	900	0.00

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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	21.9	annual days of extreme heat
Extreme Precipitation	1.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	24.6	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 $\frac{3}{4}$ 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	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	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	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	62.8
AQ-PM	43.6
AQ-DPM	13.0
Drinking Water	98.3
Lead Risk Housing	53.0
Pesticides	88.0
Toxic Releases	14.7
Traffic	19.1
Effect Indicators	—
CleanUp Sites	88.5
Groundwater	92.1
Haz Waste Facilities/Generators	94.3
Impaired Water Bodies	100
Solid Waste	96.6

Sensitive Population	—
Asthma	38.7
Cardio-vascular	53.7
Low Birth Weights	27.9
Socioeconomic Factor Indicators	—
Education	83.8
Housing	12.3
Linguistic	57.8
Poverty	65.1
Unemployment	83.2

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	26.10034646
Employed	7.686385218
Median HI	23.99589375
Education	—
Bachelor's or higher	25.84370589
High school enrollment	11.18952906
Preschool enrollment	44.32182728
Transportation	—
Auto Access	83.51084306
Active commuting	40.60053895
Social	—
2-parent households	38.16245348
Voting	45.98999102

Neighborhood	—
Alcohol availability	81.80418324
Park access	10.09880662
Retail density	1.257538817
Supermarket access	11.84396253
Tree canopy	72.5907866
Housing	—
Homeownership	45.09174901
Housing habitability	58.89901193
Low-inc homeowner severe housing cost burden	60.91364045
Low-inc renter severe housing cost burden	53.57372001
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	28.16630309
Arthritis	0.0
Asthma ER Admissions	53.1
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	20.2
Cognitively Disabled	33.5
Physically Disabled	78.7
Heart Attack ER Admissions	33.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	41.4
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	0.1
SLR Inundation Area	0.0
Children	35.2
Elderly	70.0
English Speaking	15.8
Foreign-born	55.0
Outdoor Workers	4.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	94.7
Traffic Density	15.9
Traffic Access	0.0
Other Indices	—
Hardship	77.3
Other Decision Support	—
2016 Voting	64.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	76.0

Healthy Places Index Score for Project Location (b)	21.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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: Construction Phases	Per project description
Construction: Off-Road Equipment	Per project description
Construction: Trips and VMT	Per Project Description
Construction: Architectural Coatings	Per project description
Operations: Vehicle Data	Per project description
Operations: Landscape Equipment	Per project description
Operations: Energy Use	Per project description
Operations: Refrigerants	Per project description
Construction: Dust From Material Movement	Per project description
Operations: Architectural Coatings	Per project description
Operations: Water and Waste Water	Per project description
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DPCR 40-TAF_v1 Detailed Report

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4.1.1. Unmitigated

4.1.2. Mitigated

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4.2.4. Natural Gas Emissions By Land Use - Mitigated

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4.3.1. Unmitigated

4.3.2. Mitigated

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4.4.1. Unmitigated

4.4.2. Mitigated

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4.5.1. Unmitigated

4.5.2. Mitigated

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4.6.1. Unmitigated

4.6.2. Mitigated

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4.7.1. Unmitigated

4.7.2. Mitigated

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5.10.1.1. Unmitigated

5.10.1.2. Mitigated

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5.11.2. Mitigated

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5.18.1.2. Mitigated

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5.18.1.1. Unmitigated

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5.18.2.1. Unmitigated

5.18.2.2. Mitigated

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	DPCR 40-TAF_v1
Construction Start Date	4/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.10
Precipitation (days)	25.4
Location	37.486472, -121.208722
County	Stanislaus
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2208
EDFZ	14
Electric Utility	Turlock Irrigation District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Refrigerated Warehouse-No Rail	20,646	1000sqft	474	20,646,420	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	80.8	67.5	556	558	1.71	21.4	71.4	91.3	19.8	32.3	50.6	—	194,054	194,054	6.95	7.02	105	196,426
Mit.	20.9	19.4	150	813	1.71	4.47	71.4	74.9	4.38	32.3	35.8	—	194,054	194,054	6.95	7.02	105	196,426
% Reduced	74%	71%	73%	-46%	—	79%	—	18%	78%	—	29%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	62.6	52.2	449	420	1.29	17.4	61.8	79.2	16.1	26.2	42.2	—	147,888	147,888	5.24	5.86	2.32	149,768
Mit.	16.9	15.5	127	598	1.29	3.66	61.8	65.4	3.57	26.2	29.7	—	147,888	147,888	5.24	5.86	2.32	149,768
% Reduced	73%	70%	72%	-42%	—	79%	—	17%	78%	—	30%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	37.6	31.4	263	255	0.77	10.2	33.5	43.7	9.42	14.3	23.8	—	87,322	87,322	3.15	3.05	19.3	88,328
Mit.	9.62	8.94	69.2	367	0.77	2.07	33.5	35.6	2.03	14.3	16.4	—	87,322	87,322	3.15	3.05	19.3	88,328
% Reduced	74%	72%	74%	-44%	—	80%	—	19%	78%	—	31%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.86	5.73	48.0	46.5	0.14	1.86	6.11	7.98	1.72	2.62	4.33	—	14,457	14,457	0.52	0.50	3.20	14,624
Mit.	1.76	1.63	12.6	67.0	0.14	0.38	6.11	6.49	0.37	2.62	2.99	—	14,457	14,457	0.52	0.50	3.20	14,624
% Reduced	74%	72%	74%	-44%	—	80%	—	19%	78%	—	31%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	80.8	67.5	556	558	1.71	21.4	71.4	91.3	19.8	32.3	50.6	—	194,054	194,054	6.95	7.02	105	196,426
2027	59.1	49.5	399	403	1.20	15.8	61.1	76.4	14.6	26.0	40.1	—	138,010	138,010	4.77	5.54	78.7	139,859
2028	6.73	5.70	39.4	50.6	0.12	1.57	5.17	6.73	1.44	2.24	3.69	—	13,371	13,371	0.51	0.15	3.40	13,432
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	62.6	52.2	449	420	1.29	17.4	61.8	79.2	16.1	26.2	42.2	—	147,888	147,888	5.24	5.86	2.32	149,768
2027	57.3	47.8	401	383	1.20	15.3	61.1	76.4	14.1	26.0	40.1	—	137,753	137,753	4.77	5.55	2.04	139,528
2028	6.71	5.65	39.5	49.0	0.12	1.57	5.17	6.73	1.44	2.24	3.69	—	13,263	13,263	0.51	0.15	0.09	13,321
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	37.6	31.4	263	255	0.77	10.2	33.5	43.7	9.42	14.3	23.8	—	87,322	87,322	3.15	3.05	19.3	88,328
2027	31.4	26.3	214	213	0.63	8.37	31.4	39.7	7.72	13.4	21.1	—	70,733	70,733	2.53	2.32	14.4	71,502
2028	3.22	2.71	18.9	23.6	0.06	0.75	2.47	3.22	0.69	1.07	1.77	—	6,372	6,372	0.24	0.07	0.70	6,400
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.86	5.73	48.0	46.5	0.14	1.86	6.11	7.98	1.72	2.62	4.33	—	14,457	14,457	0.52	0.50	3.20	14,624
2027	5.74	4.80	39.1	38.9	0.11	1.53	5.72	7.25	1.41	2.44	3.85	—	11,711	11,711	0.42	0.38	2.39	11,838
2028	0.59	0.49	3.45	4.31	0.01	0.14	0.45	0.59	0.13	0.20	0.32	—	1,055	1,055	0.04	0.01	0.12	1,060

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	20.9	19.4	150	813	1.71	4.47	71.4	74.9	4.38	32.3	35.8	—	194,054	194,054	6.95	7.02	105	196,426
2027	14.9	13.7	113	567	1.20	3.25	61.1	64.4	3.19	26.0	29.2	—	138,010	138,010	4.77	5.54	78.7	139,859
2028	1.81	1.75	11.0	70.1	0.12	0.31	5.17	5.47	0.30	2.24	2.54	—	13,371	13,371	0.51	0.15	3.40	13,432
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	16.9	15.5	127	598	1.29	3.66	61.8	65.4	3.57	26.2	29.7	—	147,888	147,888	5.24	5.86	2.32	149,768
2027	14.8	13.6	115	547	1.20	3.25	61.1	64.4	3.19	26.0	29.2	—	137,753	137,753	4.77	5.55	2.04	139,528
2028	1.80	1.70	11.1	68.5	0.12	0.31	5.17	5.47	0.30	2.24	2.54	—	13,263	13,263	0.51	0.15	0.09	13,321
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.62	8.94	69.2	367	0.77	2.07	33.5	35.6	2.03	14.3	16.4	—	87,322	87,322	3.15	3.05	19.3	88,328
2027	8.00	7.44	56.5	300	0.63	1.70	31.4	33.1	1.66	13.4	15.0	—	70,733	70,733	2.53	2.32	14.4	71,502
2028	0.86	0.82	5.29	33.0	0.06	0.15	2.47	2.62	0.14	1.07	1.22	—	6,372	6,372	0.24	0.07	0.70	6,400
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.76	1.63	12.6	67.0	0.14	0.38	6.11	6.49	0.37	2.62	2.99	—	14,457	14,457	0.52	0.50	3.20	14,624
2027	1.46	1.36	10.3	54.7	0.11	0.31	5.72	6.03	0.30	2.44	2.74	—	11,711	11,711	0.42	0.38	2.39	11,838
2028	0.16	0.15	0.97	6.02	0.01	0.03	0.45	0.48	0.03	0.20	0.22	—	1,055	1,055	0.04	0.01	0.12	1,060

2.4. Operations 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.	443	443	0.65	5.91	0.01	0.01	1.24	1.26	0.01	0.32	0.33	0.00	26,857	26,857	7.77	11.1	4.49	30,361
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	442	442	0.74	4.95	0.01	0.01	1.24	1.26	0.01	0.32	0.33	0.00	26,745	26,745	7.78	11.1	0.12	30,246
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	443	442	0.70	5.02	0.01	0.01	1.22	1.24	0.01	0.31	0.32	0.00	26,774	26,774	7.77	11.1	1.94	30,276
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	80.8	80.7	0.13	0.92	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	0.00	4,433	4,433	1.29	1.84	0.32	5,012

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.73	0.68	0.65	5.91	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,426	1,426	0.05	0.06	4.49	1,451
Area	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,815	19,815	7.72	11.0	—	23,293
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	5,617	5,617	—	—	—	5,617
Total	443	443	0.65	5.91	0.01	0.01	1.24	1.26	0.01	0.32	0.33	0.00	26,857	26,857	7.77	11.1	4.49	30,361

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.67	0.61	0.74	4.95	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,314	1,314	0.06	0.07	0.12	1,336
Area	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,815	19,815	7.72	11.0	—	23,293
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	5,617	5,617	—	—	—	5,617
Total	442	442	0.74	4.95	0.01	0.01	1.24	1.26	0.01	0.32	0.33	0.00	26,745	26,745	7.78	11.1	0.12	30,246
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.67	0.62	0.70	5.02	0.01	0.01	1.22	1.24	0.01	0.31	0.32	—	1,342	1,342	0.05	0.07	1.94	1,365
Area	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,815	19,815	7.72	11.0	—	23,293
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	5,617	5,617	—	—	—	5,617
Total	443	442	0.70	5.02	0.01	0.01	1.22	1.24	0.01	0.31	0.32	0.00	26,774	26,774	7.77	11.1	1.94	30,276
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12	0.11	0.13	0.92	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	—	222	222	0.01	0.01	0.32	226
Area	80.6	80.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,281	3,281	1.28	1.83	—	3,856
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	930	930	—	—	—	930
Total	80.8	80.7	0.13	0.92	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	0.00	4,433	4,433	1.29	1.84	0.32	5,012

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.73	0.68	0.65	5.91	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,426	1,426	0.05	0.06	4.49	1,451
Area	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,815	19,815	7.72	11.0	—	23,293
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	5,617	5,617	—	—	—	5,617
Total	443	443	0.65	5.91	0.01	0.01	1.24	1.26	0.01	0.32	0.33	0.00	26,857	26,857	7.77	11.1	4.49	30,361
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.67	0.61	0.74	4.95	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,314	1,314	0.06	0.07	0.12	1,336
Area	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,815	19,815	7.72	11.0	—	23,293
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	5,617	5,617	—	—	—	5,617
Total	442	442	0.74	4.95	0.01	0.01	1.24	1.26	0.01	0.32	0.33	0.00	26,745	26,745	7.78	11.1	0.12	30,246
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.67	0.62	0.70	5.02	0.01	0.01	1.22	1.24	0.01	0.31	0.32	—	1,342	1,342	0.05	0.07	1.94	1,365
Area	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,815	19,815	7.72	11.0	—	23,293

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	5,617	5,617	—	—	—	5,617
Total	443	442	0.70	5.02	0.01	0.01	1.22	1.24	0.01	0.31	0.32	0.00	26,774	26,774	7.77	11.1	1.94	30,276
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.12	0.11	0.13	0.92	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	—	222	222	0.01	0.01	0.32	226
Area	80.6	80.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,281	3,281	1.28	1.83	—	3,856
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	930	930	—	—	—	930
Total	80.8	80.7	0.13	0.92	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	0.00	4,433	4,433	1.29	1.84	0.32	5,012

3. Construction Emissions Details

3.1. Dam Facilities - Site Preparation (2026) - 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	16.6	13.9	115	114	0.27	4.90	—	4.90	4.51	—	4.51	—	28,990	28,990	1.18	0.24	—	29,089
Dust From Material Movement	—	—	—	—	—	—	20.7	20.7	—	10.0	10.0	—	—	—	—	—	—	—

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	1.27	1.07	8.83	8.75	0.02	0.38	—	0.38	0.35	—	0.35	—	2,224	2,224	0.09	0.02	—	2,231
Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.77	0.77	—	—	—	—	—	—	—
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	0.23	0.20	1.61	1.60	< 0.005	0.07	—	0.07	0.06	—	0.06	—	368	368	0.01	< 0.005	—	369
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.14	0.14	—	—	—	—	—	—	—
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	0.07	0.06	0.07	1.49	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	264	264	< 0.005	0.01	1.00	267
Vendor	0.01	0.01	0.42	0.09	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	444	444	0.01	0.07	1.15	465
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	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.6	18.6	< 0.005	< 0.005	0.03	18.8
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.1	34.1	< 0.005	0.01	0.04	35.6
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.08	3.08	< 0.005	< 0.005	0.01	3.12
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.64	5.64	< 0.005	< 0.005	0.01	5.90
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

3.2. Dam Facilities - Site Preparation (2026) - Mitigated

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	3.00	2.95	15.9	150	0.27	0.61	—	0.61	0.60	—	0.60	—	28,990	28,990	1.18	0.24	—	29,089
Dust From Material Movement	—	—	—	—	—	—	20.7	20.7	—	10.0	10.0	—	—	—	—	—	—	—
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	0.23	0.23	1.22	11.5	0.02	0.05	—	0.05	0.05	—	0.05	—	2,224	2,224	0.09	0.02	—	2,231
Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.77	0.77	—	—	—	—	—	—	—
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	0.04	0.04	0.22	2.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	368	368	0.01	< 0.005	—	369
Dust From Material Movement	—	—	—	—	—	—	0.29	0.29	—	0.14	0.14	—	—	—	—	—	—	—
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	0.07	0.06	0.07	1.49	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	264	264	< 0.005	0.01	1.00	267
Vendor	0.01	0.01	0.42	0.09	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	444	444	0.01	0.07	1.15	465
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	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.6	18.6	< 0.005	< 0.005	0.03	18.8

Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.1	34.1	< 0.005	0.01	0.04	35.6
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.08	3.08	< 0.005	< 0.005	0.01	3.12
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.64	5.64	< 0.005	< 0.005	0.01	5.90
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. Dam Facilities - Main Dam (2026) - 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	44.5	37.3	304	289	0.79	12.5	—	12.5	11.5	—	11.5	—	84,433	84,433	3.42	0.68	—	84,723
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	44.5	37.3	304	289	0.79	12.5	—	12.5	11.5	—	11.5	—	84,433	84,433	3.42	0.68	—	84,723

Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	23.9	20.1	164	156	0.42	6.70	—	6.70	6.17	—	6.17	—	45,438	45,438	1.84	0.37	—	45,594
Dust From Material Movement	—	—	—	—	—	—	24.0	24.0	—	11.0	11.0	—	—	—	—	—	—	—
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	4.37	3.67	29.9	28.4	0.08	1.22	—	1.22	1.13	—	1.13	—	7,523	7,523	0.31	0.06	—	7,549
Dust From Material Movement	—	—	—	—	—	—	4.37	4.37	—	2.00	2.00	—	—	—	—	—	—	—
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	0.07	0.06	0.07	1.49	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	264	264	< 0.005	0.01	1.00	267
Vendor	0.18	0.10	5.22	1.09	0.04	0.08	1.57	1.66	0.08	0.43	0.52	—	5,550	5,550	0.09	0.83	14.4	5,814
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.09	1.01	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	235	235	< 0.005	0.01	0.03	238
Vendor	0.18	0.09	5.61	1.05	0.04	0.08	1.57	1.66	0.08	0.43	0.52	—	5,550	5,550	0.09	0.83	0.37	5,801
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.59	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.23	132
Vendor	0.10	0.05	2.95	0.56	0.02	0.04	0.83	0.88	0.04	0.23	0.28	—	2,987	2,987	0.05	0.45	3.34	3,125
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.04	21.9
Vendor	0.02	0.01	0.54	0.10	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	495	495	0.01	0.07	0.55	517
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

3.4. Dam Facilities - Main Dam (2026) - Mitigated

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	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,433	84,433	3.42	0.68	—	84,723
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,433	84,433	3.42	0.68	—	84,723
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.96	4.84	27.3	228	0.42	1.02	—	1.02	1.01	—	1.01	—	45,438	45,438	1.84	0.37	—	45,594
Dust From Material Movement	—	—	—	—	—	—	24.0	24.0	—	11.0	11.0	—	—	—	—	—	—	—
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	0.91	0.88	4.99	41.6	0.08	0.19	—	0.19	0.18	—	0.18	—	7,523	7,523	0.31	0.06	—	7,549
Dust From Material Movement	—	—	—	—	—	—	4.37	4.37	—	2.00	2.00	—	—	—	—	—	—	—
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	0.07	0.06	0.07	1.49	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	264	264	< 0.005	0.01	1.00	267
Vendor	0.18	0.10	5.22	1.09	0.04	0.08	1.57	1.66	0.08	0.43	0.52	—	5,550	5,550	0.09	0.83	14.4	5,814
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.09	1.01	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	235	235	< 0.005	0.01	0.03	238
Vendor	0.18	0.09	5.61	1.05	0.04	0.08	1.57	1.66	0.08	0.43	0.52	—	5,550	5,550	0.09	0.83	0.37	5,801
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.59	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.23	132
Vendor	0.10	0.05	2.95	0.56	0.02	0.04	0.83	0.88	0.04	0.23	0.28	—	2,987	2,987	0.05	0.45	3.34	3,125
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.04	21.9
Vendor	0.02	0.01	0.54	0.10	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	495	495	0.01	0.07	0.55	517
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. Dam Facilities - Main Dam (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	43.5	36.5	288	285	0.78	11.7	—	11.7	10.8	—	10.8	—	84,416	84,416	3.42	0.68	—	84,706
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	43.5	36.5	288	285	0.78	11.7	—	11.7	10.8	—	10.8	—	84,416	84,416	3.42	0.68	—	84,706
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	21.8	18.3	144	143	0.39	5.88	—	5.88	5.41	—	5.41	—	42,291	42,291	1.72	0.34	—	42,436
Dust From Material Movement	—	—	—	—	—	—	22.3	22.3	—	10.2	10.2	—	—	—	—	—	—	—
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	3.98	3.34	26.3	26.1	0.07	1.07	—	1.07	0.99	—	0.99	—	7,002	7,002	0.28	0.06	—	7,026

Dust From Material Movement	—	—	—	—	—	—	4.07	4.07	—	1.86	1.86	—	—	—	—	—	—	—
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	0.07	0.06	0.06	1.34	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	258	258	< 0.005	0.01	0.90	262
Vendor	0.18	0.10	4.97	1.00	0.04	0.08	1.57	1.66	0.08	0.43	0.52	—	5,431	5,431	0.09	0.79	12.8	5,682
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.08	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	230	230	< 0.005	0.01	0.02	233
Vendor	0.18	0.09	5.31	1.01	0.04	0.08	1.57	1.66	0.08	0.43	0.52	—	5,432	5,432	0.09	0.79	0.33	5,670
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.50	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	119	119	< 0.005	< 0.005	0.20	120
Vendor	0.09	0.05	2.60	0.50	0.02	0.04	0.78	0.82	0.04	0.21	0.26	—	2,721	2,721	0.04	0.40	2.76	2,843
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	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	19.7	19.7	< 0.005	< 0.005	0.03	19.9
Vendor	0.02	0.01	0.47	0.09	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	451	451	0.01	0.07	0.46	471
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

3.6. Dam Facilities - Main Dam (2027) - Mitigated

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	9.22	8.99	50.8	423	0.78	1.89	—	1.89	1.87	—	1.87	—	84,416	84,416	3.42	0.68	—	84,706
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	9.22	8.99	50.8	423	0.78	1.89	—	1.89	1.87	—	1.87	—	84,416	84,416	3.42	0.68	—	84,706
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.62	4.50	25.5	212	0.39	0.95	—	0.95	0.94	—	0.94	—	42,291	42,291	1.72	0.34	—	42,436
Dust From Material Movement	—	—	—	—	—	—	22.3	22.3	—	10.2	10.2	—	—	—	—	—	—	—

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 Equipm ent	0.84	0.82	4.65	38.7	0.07	0.17	—	0.17	0.17	—	0.17	—	7,002	7,002	0.28	0.06	—	7,026
Dust From Material Movemer	—	—	—	—	—	—	4.07	4.07	—	1.86	1.86	—	—	—	—	—	—	—
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	0.07	0.06	0.06	1.34	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	258	258	< 0.005	0.01	0.90	262
Vendor	0.18	0.10	4.97	1.00	0.04	0.08	1.57	1.66	0.08	0.43	0.52	—	5,431	5,431	0.09	0.79	12.8	5,682
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.08	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	230	230	< 0.005	0.01	0.02	233
Vendor	0.18	0.09	5.31	1.01	0.04	0.08	1.57	1.66	0.08	0.43	0.52	—	5,432	5,432	0.09	0.79	0.33	5,670
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.50	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	119	119	< 0.005	< 0.005	0.20	120
Vendor	0.09	0.05	2.60	0.50	0.02	0.04	0.78	0.82	0.04	0.21	0.26	—	2,721	2,721	0.04	0.40	2.76	2,843
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	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	19.7	19.7	< 0.005	< 0.005	0.03	19.9

Vendor	0.02	0.01	0.47	0.09	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	451	451	0.01	0.07	0.46	471
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. Dam Facilities - Saddle Dams (2026) - 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 Equipm ent	17.9	15.0	104	130	0.38	3.93	—	3.93	3.62	—	3.62	—	40,100	40,100	1.63	0.33	—	40,238
Dust From Material Movemer	—	—	—	—	—	—	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 Equipm ent	4.62	3.87	26.8	33.4	0.10	1.01	—	1.01	0.93	—	0.93	—	10,327	10,327	0.42	0.08	—	10,363
Dust From Material Movemer	—	—	—	—	—	—	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	0.84	0.71	4.90	6.10	0.02	0.18	—	0.18	0.17	—	0.17	—	1,710	1,710	0.07	0.01	—	1,716
Dust From Material Movement	—	—	—	—	—	—	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	0.05	0.04	0.05	0.99	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	176	176	< 0.005	0.01	0.66	178
Vendor	0.18	0.10	5.22	1.09	0.04	0.08	1.57	1.66	0.08	0.43	0.52	—	5,550	5,550	0.09	0.83	14.4	5,814
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	0.01	0.01	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.6	41.6	< 0.005	< 0.005	0.07	42.1
Vendor	0.05	0.02	1.41	0.27	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,429	1,429	0.02	0.21	1.60	1,495
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	6.97
Vendor	0.01	< 0.005	0.26	0.05	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	237	237	< 0.005	0.04	0.26	248
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

3.8. Dam Facilities - Saddle Dams (2026) - Mitigated

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 Equipm ent	3.67	3.67	20.4	207	0.38	0.73	—	0.73	0.73	—	0.73	—	40,100	40,100	1.63	0.33	—	40,238
Dust From Material Mover	—	—	—	—	—	—	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 Equipm ent	0.94	0.94	5.26	53.4	0.10	0.19	—	0.19	0.19	—	0.19	—	10,327	10,327	0.42	0.08	—	10,363
Dust From Material Mover	—	—	—	—	—	—	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 Equipm ent	0.17	0.17	0.96	9.74	0.02	0.03	—	0.03	0.03	—	0.03	—	1,710	1,710	0.07	0.01	—	1,716

Dust From Material Movement	—	—	—	—	—	—	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	0.05	0.04	0.05	0.99	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	176	176	< 0.005	0.01	0.66	178
Vendor	0.18	0.10	5.22	1.09	0.04	0.08	1.57	1.66	0.08	0.43	0.52	—	5,550	5,550	0.09	0.83	14.4	5,814
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	0.01	0.01	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.6	41.6	< 0.005	< 0.005	0.07	42.1
Vendor	0.05	0.02	1.41	0.27	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,429	1,429	0.02	0.21	1.60	1,495
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.88	6.88	< 0.005	< 0.005	0.01	6.97
Vendor	0.01	< 0.005	0.26	0.05	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	237	237	< 0.005	0.04	0.26	248
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. Dam Facilities - Outlet Works (2026) - 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	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	306	306	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	306	306	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	0.44	< 0.005	0.03	—	0.03	0.03	—	0.03	—	106	106	< 0.005	< 0.005	—	107
Dust From Material Movement	—	—	—	—	—	—	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	0.02	0.02	0.15	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.6	17.6	< 0.005	< 0.005	—	17.6
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.01	0.25	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.9	43.9	< 0.005	< 0.005	0.17	44.6
Vendor	0.15	0.08	4.39	0.91	0.03	0.07	1.32	1.39	0.07	0.37	0.43	—	4,662	4,662	0.07	0.70	12.1	4,884
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.1	39.1	< 0.005	< 0.005	< 0.005	39.6
Vendor	0.15	0.08	4.71	0.89	0.03	0.07	1.32	1.39	0.07	0.37	0.43	—	4,662	4,662	0.07	0.70	0.31	4,873
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	0.02	14.2
Vendor	0.05	0.03	1.59	0.31	0.01	0.02	0.45	0.48	0.02	0.12	0.15	—	1,615	1,615	0.03	0.24	1.81	1,689
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	—	2.31	2.31	< 0.005	< 0.005	< 0.005	2.35
Vendor	0.01	0.01	0.29	0.06	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	267	267	< 0.005	0.04	0.30	280
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

3.10. Dam Facilities - Outlet Works (2026) - Mitigated

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	—	—	—	—	< 0.005	—	—	—	—	—	—	—	306	306	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	—	—	—	—	< 0.005	—	—	—	—	—	—	—	306	306	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	—	—	—	—	< 0.005	—	—	—	—	—	—	—	106	106	< 0.005	< 0.005	—	107

Dust From Material Movement	—	—	—	—	—	—	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	—	—	—	—	—	—	—	17.6	17.6	< 0.005	< 0.005	—	17.6
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.01	0.25	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.9	43.9	< 0.005	< 0.005	0.17	44.6
Vendor	0.15	0.08	4.39	0.91	0.03	0.07	1.32	1.39	0.07	0.37	0.43	—	4,662	4,662	0.07	0.70	12.1	4,884
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.1	39.1	< 0.005	< 0.005	< 0.005	39.6
Vendor	0.15	0.08	4.71	0.89	0.03	0.07	1.32	1.39	0.07	0.37	0.43	—	4,662	4,662	0.07	0.70	0.31	4,873
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	0.02	14.2
Vendor	0.05	0.03	1.59	0.31	0.01	0.02	0.45	0.48	0.02	0.12	0.15	—	1,615	1,615	0.03	0.24	1.81	1,689

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	—	2.31	2.31	< 0.005	< 0.005	< 0.005	2.35
Vendor	0.01	0.01	0.29	0.06	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	267	267	< 0.005	0.04	0.30	280
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. Dam Facilities - Outlet Works (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	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.28	0.69	< 0.005	0.05	—	0.05	0.04	—	0.04	—	167	167	0.01	< 0.005	—	168
Dust From Material Movement	—	—	—	—	—	—	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	0.04	0.03	0.23	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.7	27.7	< 0.005	< 0.005	—	27.8
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.01	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.0	43.0	< 0.005	< 0.005	0.15	43.6
Vendor	0.15	0.08	4.18	0.84	0.03	0.07	1.32	1.39	0.07	0.37	0.43	—	4,562	4,562	0.07	0.66	10.7	4,773
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.3	38.3	< 0.005	< 0.005	< 0.005	38.8

Vendor	0.15	0.08	4.46	0.85	0.03	0.07	1.32	1.39	0.07	0.37	0.43	—	4,563	4,563	0.07	0.66	0.28	4,763
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.04	21.9
Vendor	0.08	0.04	2.38	0.46	0.02	0.04	0.71	0.75	0.04	0.20	0.23	—	2,491	2,491	0.04	0.36	2.53	2,603
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.57	3.57	< 0.005	< 0.005	0.01	3.62
Vendor	0.02	0.01	0.43	0.08	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	412	412	0.01	0.06	0.42	431
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

3.12. Dam Facilities - Outlet Works (2027) - Mitigated

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	—	—	—	—	< 0.005	—	—	—	—	—	—	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	—	—	—	—	< 0.005	—	—	—	—	—	—	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	—	—	—	—	< 0.005	—	—	—	—	—	—	—	167	167	0.01	< 0.005	—	168
Dust From Material Movement	—	—	—	—	—	—	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	—	—	—	—	—	—	—	27.7	27.7	< 0.005	< 0.005	—	27.8
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.01	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.0	43.0	< 0.005	< 0.005	0.15	43.6
Vendor	0.15	0.08	4.18	0.84	0.03	0.07	1.32	1.39	0.07	0.37	0.43	—	4,562	4,562	0.07	0.66	10.7	4,773

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.3	38.3	< 0.005	< 0.005	< 0.005	38.8
Vendor	0.15	0.08	4.46	0.85	0.03	0.07	1.32	1.39	0.07	0.37	0.43	—	4,563	4,563	0.07	0.66	0.28	4,763
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.04	21.9
Vendor	0.08	0.04	2.38	0.46	0.02	0.04	0.71	0.75	0.04	0.20	0.23	—	2,491	2,491	0.04	0.36	2.53	2,603
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.57	3.57	< 0.005	< 0.005	0.01	3.62
Vendor	0.02	0.01	0.43	0.08	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	412	412	0.01	0.06	0.42	431
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. Conveyance - Open Cut Trench (2026) - 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 Equipm ent	4.54	3.79	30.1	29.0	0.07	1.20	—	1.20	1.10	—	1.10	—	7,047	7,047	0.29	0.06	—	7,071
Dust From Material Mover	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.54	3.79	30.1	29.0	0.07	1.20	—	1.20	1.10	—	1.10	—	7,047	7,047	0.29	0.06	—	7,071
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.44	2.04	16.2	15.6	0.04	0.65	—	0.65	0.59	—	0.59	—	3,793	3,793	0.15	0.03	—	3,806
Dust From Material Movement	—	—	—	—	—	—	0.69	0.69	—	0.35	0.35	—	—	—	—	—	—	—
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	0.45	0.37	2.96	2.85	0.01	0.12	—	0.12	0.11	—	0.11	—	628	628	0.03	0.01	—	630
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	—
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	0.29	0.26	0.30	6.19	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	1,099	1,099	0.01	0.04	4.15	1,114
Vendor	0.06	0.03	1.67	0.35	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,776	1,776	0.03	0.27	4.62	1,861
Hauling	0.04	0.02	1.51	0.26	0.01	0.03	0.39	0.42	0.03	0.11	0.13	—	1,410	1,410	0.03	0.22	3.37	1,480
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.37	4.21	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	978	978	0.01	0.04	0.11	990
Vendor	0.06	0.03	1.79	0.34	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,776	1,776	0.03	0.27	0.12	1,856
Hauling	0.04	0.02	1.60	0.26	0.01	0.03	0.39	0.42	0.03	0.11	0.13	—	1,410	1,410	0.03	0.22	0.09	1,477
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.18	2.48	0.00	0.00	0.56	0.56	0.00	0.13	0.13	—	543	543	0.01	0.02	0.96	550
Vendor	0.03	0.02	0.94	0.18	0.01	0.01	0.27	0.28	0.01	0.07	0.09	—	956	956	0.01	0.14	1.07	1,000
Hauling	0.02	0.01	0.85	0.14	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	759	759	0.02	0.12	0.78	796
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.45	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	89.9	89.9	< 0.005	< 0.005	0.16	91.1
Vendor	0.01	< 0.005	0.17	0.03	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	158	158	< 0.005	0.02	0.18	166
Hauling	< 0.005	< 0.005	0.16	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	126	126	< 0.005	0.02	0.13	132

3.14. Conveyance - Open Cut Trench (2026) - Mitigated

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	2.24	1.95	14.9	37.4	0.07	0.51	—	0.51	0.48	—	0.48	—	7,047	7,047	0.29	0.06	—	7,071
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.24	1.95	14.9	37.4	0.07	0.51	—	0.51	0.48	—	0.48	—	7,047	7,047	0.29	0.06	—	7,071
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	1.05	8.01	20.1	0.04	0.27	—	0.27	0.26	—	0.26	—	3,793	3,793	0.15	0.03	—	3,806
Dust From Material Movement	—	—	—	—	—	—	0.69	0.69	—	0.35	0.35	—	—	—	—	—	—	—
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	0.22	0.19	1.46	3.67	0.01	0.05	—	0.05	0.05	—	0.05	—	628	628	0.03	0.01	—	630

Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.06	0.06	—	—	—	—	—	—	—
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	0.29	0.26	0.30	6.19	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	1,099	1,099	0.01	0.04	4.15	1,114
Vendor	0.06	0.03	1.67	0.35	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,776	1,776	0.03	0.27	4.62	1,861
Hauling	0.04	0.02	1.51	0.26	0.01	0.03	0.39	0.42	0.03	0.11	0.13	—	1,410	1,410	0.03	0.22	3.37	1,480
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.37	4.21	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	978	978	0.01	0.04	0.11	990
Vendor	0.06	0.03	1.79	0.34	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,776	1,776	0.03	0.27	0.12	1,856
Hauling	0.04	0.02	1.60	0.26	0.01	0.03	0.39	0.42	0.03	0.11	0.13	—	1,410	1,410	0.03	0.22	0.09	1,477
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.18	2.48	0.00	0.00	0.56	0.56	0.00	0.13	0.13	—	543	543	0.01	0.02	0.96	550
Vendor	0.03	0.02	0.94	0.18	0.01	0.01	0.27	0.28	0.01	0.07	0.09	—	956	956	0.01	0.14	1.07	1,000
Hauling	0.02	0.01	0.85	0.14	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	759	759	0.02	0.12	0.78	796
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.45	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	89.9	89.9	< 0.005	< 0.005	0.16	91.1
Vendor	0.01	< 0.005	0.17	0.03	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	158	158	< 0.005	0.02	0.18	166
Hauling	< 0.005	< 0.005	0.16	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	126	126	< 0.005	0.02	0.13	132

3.15. Conveyance - Open Cut Trench (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	4.45	3.72	29.2	28.9	0.07	1.13	—	1.13	1.04	—	1.04	—	7,047	7,047	0.29	0.06	—	7,071
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.45	3.72	29.2	28.9	0.07	1.13	—	1.13	1.04	—	1.04	—	7,047	7,047	0.29	0.06	—	7,071
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.21	17.4	17.2	0.04	0.67	—	0.67	0.62	—	0.62	—	4,192	4,192	0.17	0.03	—	4,207
Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.39	0.39	—	—	—	—	—	—	—

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	0.48	0.40	3.17	3.14	0.01	0.12	—	0.12	0.11	—	0.11	—	694	694	0.03	0.01	—	696
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.07	0.07	—	—	—	—	—	—	—
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	0.28	0.25	0.27	5.60	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	1,075	1,075	0.01	0.04	3.77	1,090
Vendor	0.06	0.03	1.59	0.32	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,738	1,738	0.03	0.25	4.09	1,818
Hauling	0.04	0.01	1.46	0.25	0.01	0.03	0.39	0.42	0.03	0.11	0.13	—	1,377	1,377	0.02	0.21	3.12	1,445
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.23	0.34	3.81	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	958	958	0.01	0.04	0.10	969
Vendor	0.06	0.03	1.70	0.32	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,738	1,738	0.03	0.25	0.11	1,814
Hauling	0.04	0.01	1.56	0.25	0.01	0.03	0.39	0.42	0.03	0.11	0.13	—	1,377	1,377	0.02	0.21	0.08	1,442
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.18	2.48	0.00	0.00	0.62	0.62	0.00	0.15	0.15	—	588	588	0.01	0.02	0.97	595
Vendor	0.03	0.02	0.99	0.19	0.01	0.02	0.30	0.31	0.02	0.08	0.10	—	1,034	1,034	0.02	0.15	1.05	1,080
Hauling	0.03	0.01	0.91	0.15	0.01	0.02	0.23	0.24	0.02	0.06	0.08	—	819	819	0.01	0.13	0.80	858
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.45	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	97.3	97.3	< 0.005	< 0.005	0.16	98.6

Vendor	0.01	< 0.005	0.18	0.03	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	171	171	< 0.005	0.02	0.17	179
Hauling	< 0.005	< 0.005	0.17	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	136	136	< 0.005	0.02	0.13	142

3.16. Conveyance - Open Cut Trench (2027) - Mitigated

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 Equipm ent	2.24	1.94	14.9	37.4	0.07	0.51	—	0.51	0.48	—	0.48	—	7,047	7,047	0.29	0.06	—	7,071
Dust From Material Mover	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	2.24	1.94	14.9	37.4	0.07	0.51	—	0.51	0.48	—	0.48	—	7,047	7,047	0.29	0.06	—	7,071
Dust From Material Mover	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.33	1.16	8.85	22.2	0.04	0.30	—	0.30	0.28	—	0.28	—	4,192	4,192	0.17	0.03	—	4,207
Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.39	0.39	—	—	—	—	—	—	—
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	0.24	0.21	1.62	4.06	0.01	0.06	—	0.06	0.05	—	0.05	—	694	694	0.03	0.01	—	696
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.07	0.07	—	—	—	—	—	—	—
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	0.28	0.25	0.27	5.60	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	1,075	1,075	0.01	0.04	3.77	1,090
Vendor	0.06	0.03	1.59	0.32	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,738	1,738	0.03	0.25	4.09	1,818
Hauling	0.04	0.01	1.46	0.25	0.01	0.03	0.39	0.42	0.03	0.11	0.13	—	1,377	1,377	0.02	0.21	3.12	1,445
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.23	0.34	3.81	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	958	958	0.01	0.04	0.10	969
Vendor	0.06	0.03	1.70	0.32	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,738	1,738	0.03	0.25	0.11	1,814
Hauling	0.04	0.01	1.56	0.25	0.01	0.03	0.39	0.42	0.03	0.11	0.13	—	1,377	1,377	0.02	0.21	0.08	1,442
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.18	2.48	0.00	0.00	0.62	0.62	0.00	0.15	0.15	—	588	588	0.01	0.02	0.97	595

Vendor	0.03	0.02	0.99	0.19	0.01	0.02	0.30	0.31	0.02	0.08	0.10	—	1,034	1,034	0.02	0.15	1.05	1,080
Hauling	0.03	0.01	0.91	0.15	0.01	0.02	0.23	0.24	0.02	0.06	0.08	—	819	819	0.01	0.13	0.80	858
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.45	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	97.3	97.3	< 0.005	< 0.005	0.16	98.6
Vendor	0.01	< 0.005	0.18	0.03	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	171	171	< 0.005	0.02	0.17	179
Hauling	< 0.005	< 0.005	0.17	0.03	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	136	136	< 0.005	0.02	0.13	142

3.17. Tunneling - Outlet and Conveyance (2026) - 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	3.78	3.16	26.9	29.5	0.08	1.19	—	1.19	1.10	—	1.10	—	8,753	8,753	0.36	0.07	—	8,783
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.78	3.16	26.9	29.5	0.08	1.19	—	1.19	1.10	—	1.10	—	8,753	8,753	0.36	0.07	—	8,783
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	10.7	11.7	0.03	0.47	—	0.47	0.44	—	0.44	—	3,477	3,477	0.14	0.03	—	3,489
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	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	0.27	0.23	1.95	2.14	0.01	0.09	—	0.09	0.08	—	0.08	—	576	576	0.02	< 0.005	—	578

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.19	0.16	0.19	3.96	0.00	0.00	0.68	0.68	0.00	0.16	0.16	—	703	703	0.01	0.02	2.66	713
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.15	0.24	2.70	0.00	0.00	0.68	0.68	0.00	0.16	0.16	—	626	626	0.01	0.02	0.07	634
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.09	1.17	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	257	257	< 0.005	0.01	0.46	260
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	0.01	0.01	0.02	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	42.5	42.5	< 0.005	< 0.005	0.08	43.0
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

3.18. Tunneling - Outlet and Conveyance (2026) - Mitigated

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	1.79	1.61	10.4	47.4	0.08	0.40	—	0.40	0.38	—	0.38	—	8,753	8,753	0.36	0.07	—	8,783
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.79	1.61	10.4	47.4	0.08	0.40	—	0.40	0.38	—	0.38	—	8,753	8,753	0.36	0.07	—	8,783
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	0.64	4.15	18.8	0.03	0.16	—	0.16	0.15	—	0.15	—	3,477	3,477	0.14	0.03	—	3,489
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	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	0.13	0.12	0.76	3.44	0.01	0.03	—	0.03	0.03	—	0.03	—	576	576	0.02	< 0.005	—	578
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.19	0.16	0.19	3.96	0.00	0.00	0.68	0.68	0.00	0.16	0.16	—	703	703	0.01	0.02	2.66	713
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.15	0.24	2.70	0.00	0.00	0.68	0.68	0.00	0.16	0.16	—	626	626	0.01	0.02	0.07	634
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.09	1.17	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	257	257	< 0.005	0.01	0.46	260
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	0.01	0.01	0.02	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	42.5	42.5	< 0.005	< 0.005	0.08	43.0
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

3.19. Dam Facilities - Spillway (2026) - 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	0.75	0.63	5.28	5.72	0.01	0.16	—	0.16	0.15	—	0.15	—	861	861	0.03	0.01	—	864

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	5.28	5.72	0.01	0.16	—	0.16	0.15	—	0.15	—	861	861	0.03	0.01	—	864
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.28	2.36	2.55	< 0.005	0.07	—	0.07	0.07	—	0.07	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 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	0.06	0.05	0.43	0.47	< 0.005	0.01	—	0.01	0.01	—	0.01	—	63.6	63.6	< 0.005	< 0.005	—	63.9

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	0.02	0.37	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	65.9	65.9	< 0.005	< 0.005	0.25	66.9
Vendor	0.12	0.06	3.34	0.69	0.03	0.05	1.01	1.06	0.05	0.28	0.33	—	3,552	3,552	0.06	0.53	9.23	3,721
Hauling	0.59	0.34	17.3	4.23	0.10	0.28	3.86	4.14	0.28	1.06	1.33	—	14,290	14,290	0.32	2.26	33.5	15,006
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.7	58.7	< 0.005	< 0.005	0.01	59.4
Vendor	0.12	0.06	3.59	0.68	0.03	0.05	1.01	1.06	0.05	0.28	0.33	—	3,552	3,552	0.06	0.53	0.24	3,712
Hauling	0.57	0.33	18.4	4.30	0.10	0.28	3.86	4.14	0.28	1.06	1.33	—	14,299	14,299	0.32	2.26	0.87	14,982
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.0	27.0	< 0.005	< 0.005	0.05	27.4
Vendor	0.05	0.03	1.56	0.30	0.01	0.02	0.44	0.47	0.02	0.12	0.15	—	1,585	1,585	0.02	0.24	1.77	1,658
Hauling	0.26	0.15	8.08	1.90	0.04	0.12	1.70	1.82	0.12	0.47	0.59	—	6,378	6,378	0.14	1.01	6.45	6,689
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.47	4.47	< 0.005	< 0.005	0.01	4.53
Vendor	0.01	< 0.005	0.29	0.05	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	262	262	< 0.005	0.04	0.29	275
Hauling	0.05	0.03	1.48	0.35	0.01	0.02	0.31	0.33	0.02	0.09	0.11	—	1,056	1,056	0.02	0.17	1.07	1,107

3.20. Dam Facilities - Spillway (2026) - Mitigated

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	0.11	0.11	3.32	4.95	0.01	0.01	—	0.01	0.01	—	0.01	—	861	861	0.03	0.01	—	864
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	3.32	4.95	0.01	0.01	—	0.01	0.01	—	0.01	—	861	861	0.03	0.01	—	864
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.48	2.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 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 Equipm ent	0.01	0.01	0.27	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.6	63.6	< 0.005	< 0.005	—	63.9
Dust From Material Movemer	—	—	—	—	—	—	< 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	0.02	0.37	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	65.9	65.9	< 0.005	< 0.005	0.25	66.9
Vendor	0.12	0.06	3.34	0.69	0.03	0.05	1.01	1.06	0.05	0.28	0.33	—	3,552	3,552	0.06	0.53	9.23	3,721
Hauling	0.59	0.34	17.3	4.23	0.10	0.28	3.86	4.14	0.28	1.06	1.33	—	14,290	14,290	0.32	2.26	33.5	15,006
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.7	58.7	< 0.005	< 0.005	0.01	59.4
Vendor	0.12	0.06	3.59	0.68	0.03	0.05	1.01	1.06	0.05	0.28	0.33	—	3,552	3,552	0.06	0.53	0.24	3,712
Hauling	0.57	0.33	18.4	4.30	0.10	0.28	3.86	4.14	0.28	1.06	1.33	—	14,299	14,299	0.32	2.26	0.87	14,982
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.0	27.0	< 0.005	< 0.005	0.05	27.4
Vendor	0.05	0.03	1.56	0.30	0.01	0.02	0.44	0.47	0.02	0.12	0.15	—	1,585	1,585	0.02	0.24	1.77	1,658
Hauling	0.26	0.15	8.08	1.90	0.04	0.12	1.70	1.82	0.12	0.47	0.59	—	6,378	6,378	0.14	1.01	6.45	6,689
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.47	4.47	< 0.005	< 0.005	0.01	4.53

Vendor	0.01	< 0.005	0.29	0.05	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	262	262	< 0.005	0.04	0.29	275
Hauling	0.05	0.03	1.48	0.35	0.01	0.02	0.31	0.33	0.02	0.09	0.11	—	1,056	1,056	0.02	0.17	1.07	1,107

3.21. Dam Facilities - Spillway (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	0.73	0.61	5.23	5.72	0.01	0.15	—	0.15	0.14	—	0.14	—	862	862	0.03	0.01	—	865
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	5.23	5.72	0.01	0.15	—	0.15	0.14	—	0.14	—	862	862	0.03	0.01	—	865
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.18	0.15	1.27	1.39	< 0.005	0.04	—	0.04	0.03	—	0.03	—	209	209	0.01	< 0.005	—	210
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.6	34.6	< 0.005	< 0.005	—	34.7
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	0.01	0.02	0.34	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	64.5	64.5	< 0.005	< 0.005	0.23	65.4
Vendor	0.12	0.06	3.18	0.64	0.03	0.05	1.01	1.06	0.05	0.28	0.33	—	3,476	3,476	0.06	0.51	8.17	3,636
Hauling	0.59	0.25	16.8	4.13	0.10	0.28	3.86	4.14	0.28	1.06	1.33	—	13,964	13,964	0.23	2.17	31.0	14,647
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.5	57.5	< 0.005	< 0.005	0.01	58.2
Vendor	0.12	0.06	3.40	0.65	0.03	0.05	1.01	1.06	0.05	0.28	0.33	—	3,476	3,476	0.06	0.51	0.21	3,629
Hauling	0.57	0.23	17.9	4.21	0.10	0.28	3.86	4.14	0.28	1.06	1.33	—	13,973	13,973	0.23	2.17	0.80	14,627
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.4	14.4	< 0.005	< 0.005	0.02	14.6

Vendor	0.03	0.01	0.80	0.16	0.01	0.01	0.24	0.25	0.01	0.07	0.08	—	844	844	0.01	0.12	0.86	881
Hauling	0.14	0.06	4.26	1.01	0.02	0.07	0.93	0.99	0.07	0.25	0.32	—	3,389	3,389	0.06	0.53	3.25	3,551
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.38	2.38	< 0.005	< 0.005	< 0.005	2.41
Vendor	0.01	< 0.005	0.15	0.03	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	140	140	< 0.005	0.02	0.14	146
Hauling	0.03	0.01	0.78	0.18	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	561	561	0.01	0.09	0.54	588

3.22. Dam Facilities - Spillway (2027) - Mitigated

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	0.11	0.11	3.32	4.95	0.01	0.01	—	0.01	0.01	—	0.01	—	862	862	0.03	0.01	—	865
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	3.32	4.95	0.01	0.01	—	0.01	0.01	—	0.01	—	862	862	0.03	0.01	—	865

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.81	1.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	209	209	0.01	< 0.005	—	210
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.15	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.6	34.6	< 0.005	< 0.005	—	34.7
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	0.01	0.02	0.34	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	64.5	64.5	< 0.005	< 0.005	0.23	65.4
Vendor	0.12	0.06	3.18	0.64	0.03	0.05	1.01	1.06	0.05	0.28	0.33	—	3,476	3,476	0.06	0.51	8.17	3,636
Hauling	0.59	0.25	16.8	4.13	0.10	0.28	3.86	4.14	0.28	1.06	1.33	—	13,964	13,964	0.23	2.17	31.0	14,647

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.5	57.5	< 0.005	< 0.005	0.01	58.2
Vendor	0.12	0.06	3.40	0.65	0.03	0.05	1.01	1.06	0.05	0.28	0.33	—	3,476	3,476	0.06	0.51	0.21	3,629
Hauling	0.57	0.23	17.9	4.21	0.10	0.28	3.86	4.14	0.28	1.06	1.33	—	13,973	13,973	0.23	2.17	0.80	14,627
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.4	14.4	< 0.005	< 0.005	0.02	14.6
Vendor	0.03	0.01	0.80	0.16	0.01	0.01	0.24	0.25	0.01	0.07	0.08	—	844	844	0.01	0.12	0.86	881
Hauling	0.14	0.06	4.26	1.01	0.02	0.07	0.93	0.99	0.07	0.25	0.32	—	3,389	3,389	0.06	0.53	3.25	3,551
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.38	2.38	< 0.005	< 0.005	< 0.005	2.41
Vendor	0.01	< 0.005	0.15	0.03	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	140	140	< 0.005	0.02	0.14	146
Hauling	0.03	0.01	0.78	0.18	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	561	561	0.01	0.09	0.54	588

3.23. Dam Facilities - Site Restoration (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	3.01	2.52	20.0	26.1	0.04	0.95	—	0.95	0.88	—	0.88	—	4,268	4,268	0.17	0.03	—	4,283
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.01	2.52	20.0	26.1	0.04	0.95	—	0.95	0.88	—	0.88	—	4,268	4,268	0.17	0.03	—	4,283
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.11	0.92	7.34	9.57	0.02	0.35	—	0.35	0.32	—	0.32	—	1,567	1,567	0.06	0.01	—	1,572
Dust From Material Movement	—	—	—	—	—	—	0.38	0.38	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.34	1.75	< 0.005	0.06	—	0.06	0.06	—	0.06	—	259	259	0.01	< 0.005	—	260
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.67	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	0.45	131
Vendor	0.07	0.03	1.79	0.36	0.01	0.03	0.57	0.60	0.03	0.16	0.19	—	1,955	1,955	0.03	0.28	4.60	2,045
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.46	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.07	0.03	1.91	0.36	0.01	0.03	0.57	0.60	0.03	0.16	0.19	—	1,956	1,956	0.03	0.28	0.12	2,041
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	43.5	43.5	< 0.005	< 0.005	0.07	44.1
Vendor	0.02	0.01	0.68	0.13	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	718	718	0.01	0.10	0.73	750
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.21	7.21	< 0.005	< 0.005	0.01	7.30
Vendor	< 0.005	< 0.005	0.13	0.02	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.12	124
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

3.24. Dam Facilities - Site Restoration (2027) - Mitigated

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	0.34	0.34	1.75	24.9	0.04	0.07	—	0.07	0.07	—	0.07	—	4,268	4,268	0.17	0.03	—	4,283
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	1.75	24.9	0.04	0.07	—	0.07	0.07	—	0.07	—	4,268	4,268	0.17	0.03	—	4,283
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	0.64	9.13	0.02	0.02	—	0.02	0.02	—	0.02	—	1,567	1,567	0.06	0.01	—	1,572
Dust From Material Movement	—	—	—	—	—	—	0.38	0.38	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	1.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	259	259	0.01	< 0.005	—	260

Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.67	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	0.45	131
Vendor	0.07	0.03	1.79	0.36	0.01	0.03	0.57	0.60	0.03	0.16	0.19	—	1,955	1,955	0.03	0.28	4.60	2,045
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.46	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	0.01	116
Vendor	0.07	0.03	1.91	0.36	0.01	0.03	0.57	0.60	0.03	0.16	0.19	—	1,956	1,956	0.03	0.28	0.12	2,041
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	43.5	43.5	< 0.005	< 0.005	0.07	44.1
Vendor	0.02	0.01	0.68	0.13	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	718	718	0.01	0.10	0.73	750
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	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.21	7.21	< 0.005	< 0.005	0.01	7.30
Vendor	< 0.005	< 0.005	0.13	0.02	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.12	124
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

3.25. Pumping Plant (2026) - 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	6.66	5.59	42.9	46.0	0.11	1.76	—	1.76	1.62	—	1.62	—	12,282	12,282	0.50	0.10	—	12,324
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.66	5.59	42.9	46.0	0.11	1.76	—	1.76	1.62	—	1.62	—	12,282	12,282	0.50	0.10	—	12,324
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.40	2.01	15.4	16.5	0.04	0.64	—	0.64	0.58	—	0.58	—	4,422	4,422	0.18	0.04	—	4,438
Dust From Material Movement	—	—	—	—	—	—	1.49	1.49	—	0.72	0.72	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	2.82	3.02	0.01	0.12	—	0.12	0.11	—	0.11	—	732	732	0.03	0.01	—	735
Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.13	0.13	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.28	5.82	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	1,033	1,033	0.01	0.04	3.90	1,047
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	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.2	98.2	< 0.005	0.02	0.23	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.26	0.22	0.35	3.96	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	920	920	0.01	0.04	0.10	931
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	0.13	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.2	98.2	< 0.005	0.02	0.01	103
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.56	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	342	342	< 0.005	0.01	0.61	346
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	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.4	35.4	< 0.005	0.01	0.04	37.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.28	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	56.6	56.6	< 0.005	< 0.005	0.10	57.3
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	—	5.85	5.85	< 0.005	< 0.005	0.01	6.14

3.26. Pumping Plant (2026) - Mitigated

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	1.50	1.45	10.7	65.2	0.11	0.30	—	0.30	0.30	—	0.30	—	12,282	12,282	0.50	0.10	—	12,324
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.45	10.7	65.2	0.11	0.30	—	0.30	0.30	—	0.30	—	12,282	12,282	0.50	0.10	—	12,324
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.52	3.84	23.5	0.04	0.11	—	0.11	0.11	—	0.11	—	4,422	4,422	0.18	0.04	—	4,438
Dust From Material Movement	—	—	—	—	—	—	1.49	1.49	—	0.72	0.72	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.10	0.10	0.70	4.28	0.01	0.02	—	0.02	0.02	—	0.02	—	732	732	0.03	0.01	—	735
Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.13	0.13	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.28	5.82	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	1,033	1,033	0.01	0.04	3.90	1,047
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	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.2	98.2	< 0.005	0.02	0.23	103
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.22	0.35	3.96	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	920	920	0.01	0.04	0.10	931
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	0.13	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	98.2	98.2	< 0.005	0.02	0.01	103
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.56	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	342	342	< 0.005	0.01	0.61	346
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	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.4	35.4	< 0.005	0.01	0.04	37.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.28	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	56.6	56.6	< 0.005	< 0.005	0.10	57.3
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	—	5.85	5.85	< 0.005	< 0.005	0.01	6.14

3.27. Pumping Plant (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	6.55	5.50	41.0	45.7	0.11	1.66	—	1.66	1.53	—	1.53	—	12,281	12,281	0.50	0.10	—	12,323
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.55	5.50	41.0	45.7	0.11	1.66	—	1.66	1.53	—	1.53	—	12,281	12,281	0.50	0.10	—	12,323
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—

Architectural Coating	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.68	3.93	29.3	32.6	0.08	1.19	—	1.19	1.09	—	1.09	—	8,772	8,772	0.36	0.07	—	8,802
Dust From Material Movement	—	—	—	—	—	—	2.96	2.96	—	1.43	1.43	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.85	0.72	5.35	5.96	0.01	0.22	—	0.22	0.20	—	0.20	—	1,452	1,452	0.06	0.01	—	1,457
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.26	0.26	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.23	0.25	5.27	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	1,011	1,011	0.01	0.03	3.54	1,025
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	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.9	95.9	< 0.005	0.01	0.21	101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.32	3.58	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	900	900	0.01	0.04	0.09	911
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	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.0	96.0	< 0.005	0.01	0.01	100
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.20	2.80	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	663	663	0.01	0.03	1.09	672
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	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	68.5	68.5	< 0.005	0.01	0.07	71.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.18	111
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	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.9

3.28. Pumping Plant (2027) - Mitigated

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 Equipm	1.50	1.45	10.7	65.2	0.11	0.30	—	0.30	0.30	—	0.30	—	12,281	12,281	0.50	0.10	—	12,323
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.45	10.7	65.2	0.11	0.30	—	0.30	0.30	—	0.30	—	12,281	12,281	0.50	0.10	—	12,323
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.03	7.62	46.5	0.08	0.22	—	0.22	0.21	—	0.21	—	8,772	8,772	0.36	0.07	—	8,802

Dust From Material Movement	—	—	—	—	—	—	2.96	2.96	—	1.43	1.43	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.20	0.19	1.39	8.49	0.01	0.04	—	0.04	0.04	—	0.04	—	1,452	1,452	0.06	0.01	—	1,457
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.26	0.26	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.23	0.25	5.27	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	1,011	1,011	0.01	0.03	3.54	1,025
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	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.9	95.9	< 0.005	0.01	0.21	101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.21	0.32	3.58	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	900	900	0.01	0.04	0.09	911

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	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.0	96.0	< 0.005	0.01	0.01	100
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.20	2.80	0.00	0.00	0.70	0.70	0.00	0.16	0.16	—	663	663	0.01	0.03	1.09	672
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	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	68.5	68.5	< 0.005	0.01	0.07	71.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.18	111
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	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.9

3.29. Pumping Plant (2028) - 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	6.42	5.39	39.1	45.6	0.11	1.57	—	1.57	1.44	—	1.44	—	12,287	12,287	0.50	0.10	—	12,329
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.42	5.39	39.1	45.6	0.11	1.57	—	1.57	1.44	—	1.44	—	12,287	12,287	0.50	0.10	—	12,329
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.08	2.58	18.7	21.9	0.05	0.75	—	0.75	0.69	—	0.69	—	5,891	5,891	0.24	0.05	—	5,911
Dust From Material Movement	—	—	—	—	—	—	1.99	1.99	—	0.96	0.96	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	3.42	3.99	0.01	0.14	—	0.14	0.13	—	0.13	—	975	975	0.04	0.01	—	979

Dust From Material Movement	—	—	—	—	—	—	0.36	0.36	—	0.18	0.18	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.22	0.22	4.90	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	991	991	0.01	0.03	3.20	1,005
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	0.11	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.5	93.5	< 0.005	0.01	0.20	98.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.28	3.33	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	883	883	0.01	0.04	0.08	894
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	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.6	93.6	< 0.005	0.01	0.01	98.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.12	1.75	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	437	437	< 0.005	0.02	0.66	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	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.9	44.9	< 0.005	0.01	0.04	47.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.32	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	72.3	72.3	< 0.005	< 0.005	0.11	73.2
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	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.43	7.43	< 0.005	< 0.005	0.01	7.79

3.30. Pumping Plant (2028) - Mitigated

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	1.50	1.45	10.7	65.2	0.11	0.30	—	0.30	0.30	—	0.30	—	12,287	12,287	0.50	0.10	—	12,329
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.45	10.7	65.2	0.11	0.30	—	0.30	0.30	—	0.30	—	12,287	12,287	0.50	0.10	—	12,329
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.69	5.12	31.2	0.05	0.15	—	0.15	0.14	—	0.14	—	5,891	5,891	0.24	0.05	—	5,911
Dust From Material Movement	—	—	—	—	—	—	1.99	1.99	—	0.96	0.96	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.93	5.70	0.01	0.03	—	0.03	0.03	—	0.03	—	975	975	0.04	0.01	—	979
Dust From Material Movement	—	—	—	—	—	—	0.36	0.36	—	0.18	0.18	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.23	0.22	0.22	4.90	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	991	991	0.01	0.03	3.20	1,005
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	0.11	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.5	93.5	< 0.005	0.01	0.20	98.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.28	3.33	0.00	0.00	1.00	1.00	0.00	0.23	0.23	—	883	883	0.01	0.04	0.08	894
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	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	93.6	93.6	< 0.005	0.01	0.01	98.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.12	1.75	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	437	437	< 0.005	0.02	0.66	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	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	44.9	44.9	< 0.005	0.01	0.04	47.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.32	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	72.3	72.3	< 0.005	< 0.005	0.11	73.2
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	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.43	7.43	< 0.005	< 0.005	0.01	7.79

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated	0.73	0.68	0.65	5.91	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,426	1,426	0.05	0.06	4.49	1,451
Total	0.73	0.68	0.65	5.91	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,426	1,426	0.05	0.06	4.49	1,451
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.67	0.61	0.74	4.95	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,314	1,314	0.06	0.07	0.12	1,336
Total	0.67	0.61	0.74	4.95	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,314	1,314	0.06	0.07	0.12	1,336
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.12	0.11	0.13	0.92	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	—	222	222	0.01	0.01	0.32	226
Total	0.12	0.11	0.13	0.92	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	—	222	222	0.01	0.01	0.32	226

4.1.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.73	0.68	0.65	5.91	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,426	1,426	0.05	0.06	4.49	1,451
Total	0.73	0.68	0.65	5.91	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,426	1,426	0.05	0.06	4.49	1,451
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehouse-No Rail	0.67	0.61	0.74	4.95	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,314	1,314	0.06	0.07	0.12	1,336
Total	0.67	0.61	0.74	4.95	0.01	0.01	1.24	1.26	0.01	0.32	0.33	—	1,314	1,314	0.06	0.07	0.12	1,336
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.12	0.11	0.13	0.92	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	—	222	222	0.01	0.01	0.32	226
Total	0.12	0.11	0.13	0.92	< 0.005	< 0.005	0.22	0.23	< 0.005	0.06	0.06	—	222	222	0.01	0.01	0.32	226

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	19,815	19,815	7.72	11.0	—	23,293
Total	—	—	—	—	—	—	—	—	—	—	—	—	19,815	19,815	7.72	11.0	—	23,293
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	19,815	19,815	7.72	11.0	—	23,293

Total	—	—	—	—	—	—	—	—	—	—	—	—	19,815	19,815	7.72	11.0	—	23,293
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,281	3,281	1.28	1.83	—	3,856
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,281	3,281	1.28	1.83	—	3,856

4.2.2. Electricity Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	19,815	19,815	7.72	11.0	—	23,293
Total	—	—	—	—	—	—	—	—	—	—	—	—	19,815	19,815	7.72	11.0	—	23,293
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	19,815	19,815	7.72	11.0	—	23,293
Total	—	—	—	—	—	—	—	—	—	—	—	—	19,815	19,815	7.72	11.0	—	23,293
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,281	3,281	1.28	1.83	—	3,856
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,281	3,281	1.28	1.83	—	3,856

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	80.6	80.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	80.6	80.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	442	442	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	80.6	80.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	80.6	80.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.6.2. Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

Equipm ent Type	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. 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)

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	3,970	3,970	—	—	—	3,970
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,970	3,970	—	—	—	3,970
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	3,970	3,970	—	—	—	3,970
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,970	3,970	—	—	—	3,970
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	657	657	—	—	—	657
Total	—	—	—	—	—	—	—	—	—	—	—	—	657	657	—	—	—	657

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	1,648	1,648	—	—	—	1,648
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,648	1,648	—	—	—	1,648
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	1,648	1,648	—	—	—	1,648
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,648	1,648	—	—	—	1,648
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	273	273	—	—	—	273

Total	—	—	—	—	—	—	—	—	—	—	—	—	273	273	—	—	—	273

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	3,970	3,970	—	—	—	3,970
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,970	3,970	—	—	—	3,970
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	3,970	3,970	—	—	—	3,970
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,970	3,970	—	—	—	3,970
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	657	657	—	—	—	657
Total	—	—	—	—	—	—	—	—	—	—	—	—	657	657	—	—	—	657

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	1,648	1,648	—	—	—	1,648
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,648	1,648	—	—	—	1,648
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	1,648	1,648	—	—	—	1,648
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,648	1,648	—	—	—	1,648
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	273	273	—	—	—	273
Total	—	—	—	—	—	—	—	—	—	—	—	—	273	273	—	—	—	273

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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
Dam Facilities - Site Preparation	Site Preparation	4/1/2026	5/9/2026	5.00	28.0	Dam Facilities - Site Preparation
Dam Facilities - Main Dam	Site Preparation	4/1/2026	9/13/2027	5.00	379	Dam Facilities - Main Dam

Dam Facilities - Saddle Dams	Site Preparation	5/19/2026	9/25/2026	5.00	94.0	Dam Facilities - Saddle Dams
Dam Facilities - Outlet Works	Site Preparation	7/8/2026	10/6/2027	5.00	326	Dam Facilities - Outlet Works
Conveyance - Open Cut Trench	Site Preparation	4/1/2026	10/31/2027	5.00	413	Conveyance - Open Cut Trench
Tunneling - Outlet and Conveyance	Site Preparation	4/1/2026	10/20/2026	5.00	145	Tunneling - Outlet and Conveyance
Dam Facilities - Spillway	Grading	5/18/2026	5/4/2027	5.00	252	Dam Facilities - Spillway
Dam Facilities - Site Restoration	Grading	5/18/2027	11/19/2027	5.00	134	Dam Facilities - Site Restoration
Pumping Plant	Grading	7/1/2026	9/1/2028	5.00	568	Pumping Plant

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
Dam Facilities - Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	20.0	16.0	0.38
Dam Facilities - Site Preparation	Graders	Diesel	Average	1.00	20.0	148	0.41
Dam Facilities - Site Preparation	Off-Highway Trucks	Diesel	Average	3.00	20.0	376	0.38
Dam Facilities - Site Preparation	Other Construction Equipment	Diesel	Average	1.00	20.0	82.0	0.42
Dam Facilities - Site Preparation	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	20.0	367	0.40
Dam Facilities - Site Preparation	Scrapers	Diesel	Average	1.00	20.0	423	0.48
Dam Facilities - Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	2.00	20.0	84.0	0.37

Dam Facilities - Main Dam	Dumpers/Tenders	Diesel	Average	4.00	20.0	16.0	0.38
Dam Facilities - Main Dam	Excavators	Diesel	Average	1.00	20.0	36.0	0.38
Dam Facilities - Main Dam	Off-Highway Trucks	Diesel	Average	9.00	20.0	376	0.38
Dam Facilities - Main Dam	Other Construction Equipment	Diesel	Average	3.00	20.0	82.0	0.42
Dam Facilities - Main Dam	Plate Compactors	Diesel	Average	6.00	20.0	8.00	0.43
Dam Facilities - Main Dam	Rubber Tired Dozers	Diesel	Average	6.00	20.0	367	0.40
Dam Facilities - Main Dam	Scrapers	Diesel	Average	6.00	20.0	423	0.48
Dam Facilities - Main Dam	Tractors/Loaders/Back hoes	Diesel	Average	2.00	20.0	84.0	0.37
Dam Facilities - Saddle Dams	Dumpers/Tenders	Diesel	Average	10.0	20.0	16.0	0.38
Dam Facilities - Saddle Dams	Excavators	Diesel	Average	1.00	20.0	36.0	0.38
Dam Facilities - Saddle Dams	Off-Highway Trucks	Diesel	Average	9.00	20.0	376	0.38
Dam Facilities - Saddle Dams	Other Construction Equipment	Diesel	Average	3.00	20.0	82.0	0.42
Dam Facilities - Saddle Dams	Tractors/Loaders/Back hoes	Diesel	Average	8.00	20.0	84.0	0.37
Dam Facilities - Outlet Works	Dumpers/Tenders	Diesel	Average	2.00	20.0	16.0	0.38
Conveyance - Open Cut Trench	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
Conveyance - Open Cut Trench	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40
Conveyance - Open Cut Trench	Pumps	Diesel	Average	1.00	24.0	11.0	0.74

Conveyance - Open Cut Trench	Dumpers/Tenders	Diesel	Average	15.0	10.0	16.0	0.38
Conveyance - Open Cut Trench	Tractors/Loaders/Back hoes	Diesel	Average	2.00	10.0	84.0	0.37
Conveyance - Open Cut Trench	Off-Highway Trucks	Diesel	Average	3.00	5.00	376	0.38
Conveyance - Open Cut Trench	Other Construction Equipment	Diesel	Average	8.00	2.00	82.0	0.42
Conveyance - Open Cut Trench	Cranes	Diesel	Average	1.00	6.00	367	0.29
Tunneling - Outlet and Conveyance	Bore/Drill Rigs	Diesel	Average	3.00	10.0	367	0.40
Tunneling - Outlet and Conveyance	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Tunneling - Outlet and Conveyance	Dumpers/Tenders	Diesel	Average	8.00	10.0	16.0	0.38
Tunneling - Outlet and Conveyance	Other Construction Equipment	Diesel	Average	9.00	5.00	82.0	0.42
Tunneling - Outlet and Conveyance	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Tunneling - Outlet and Conveyance	Cranes	Diesel	Average	1.00	6.00	367	0.29
Dam Facilities - Spillway	Dumpers/Tenders	Diesel	Average	1.00	20.0	16.0	0.38
Dam Facilities - Spillway	Excavators	Diesel	Average	2.00	20.0	36.0	0.38
Dam Facilities - Site Restoration	Dumpers/Tenders	Diesel	Average	4.00	20.0	16.0	0.38
Dam Facilities - Site Restoration	Graders	Diesel	Average	2.00	20.0	148	0.41
Dam Facilities - Site Restoration	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Restoration	Tractors/Loaders/Back hoes	Diesel	Average	1.00	20.0	84.0	0.37
Pumping Plant	Excavators	Diesel	Average	2.00	6.00	36.0	0.38

Pumping Plant	Rubber Tired Dozers	Diesel	Average	2.00	6.00	367	0.40
Pumping Plant	Off-Highway Trucks	Diesel	Average	6.00	6.00	376	0.38
Pumping Plant	Dumpers/Tenders	Diesel	Average	6.00	6.00	16.0	0.38
Pumping Plant	Tractors/Loaders/Back hoes	Diesel	Average	4.00	5.00	84.0	0.37
Pumping Plant	Rollers	Diesel	Average	4.00	6.00	36.0	0.38
Pumping Plant	Graders	Diesel	Average	2.00	6.00	148	0.41
Pumping Plant	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Pumping Plant	Cranes	Diesel	Average	2.00	6.00	367	0.29

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Dam Facilities - Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	20.0	16.0	0.38
Dam Facilities - Site Preparation	Graders	Diesel	Tier 4 Final	1.00	20.0	148	0.41
Dam Facilities - Site Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	20.0	376	0.38
Dam Facilities - Site Preparation	Other Construction Equipment	Diesel	Tier 4 Final	1.00	20.0	82.0	0.42
Dam Facilities - Site Preparation	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	20.0	367	0.40
Dam Facilities - Site Preparation	Scrapers	Diesel	Tier 4 Final	1.00	20.0	423	0.48
Dam Facilities - Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	20.0	84.0	0.37
Dam Facilities - Main Dam	Dumpers/Tenders	Diesel	Average	4.00	20.0	16.0	0.38
Dam Facilities - Main Dam	Excavators	Diesel	Tier 4 Final	1.00	20.0	36.0	0.38

Dam Facilities - Main Dam	Off-Highway Trucks	Diesel	Tier 4 Final	9.00	20.0	376	0.38
Dam Facilities - Main Dam	Other Construction Equipment	Diesel	Tier 4 Final	3.00	20.0	82.0	0.42
Dam Facilities - Main Dam	Plate Compactors	Diesel	Average	6.00	20.0	8.00	0.43
Dam Facilities - Main Dam	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	20.0	367	0.40
Dam Facilities - Main Dam	Scrapers	Diesel	Tier 4 Final	6.00	20.0	423	0.48
Dam Facilities - Main Dam	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	20.0	84.0	0.37
Dam Facilities - Saddle Dams	Dumpers/Tenders	Diesel	Tier 4 Final	10.0	20.0	16.0	0.38
Dam Facilities - Saddle Dams	Excavators	Diesel	Tier 4 Final	1.00	20.0	36.0	0.38
Dam Facilities - Saddle Dams	Off-Highway Trucks	Diesel	Tier 4 Final	9.00	20.0	376	0.38
Dam Facilities - Saddle Dams	Other Construction Equipment	Diesel	Tier 4 Final	3.00	20.0	82.0	0.42
Dam Facilities - Saddle Dams	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	8.00	20.0	84.0	0.37
Dam Facilities - Outlet Works	Dumpers/Tenders	Diesel	Tier 4 Final	2.00	20.0	16.0	0.38
Conveyance - Open Cut Trench	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
Conveyance - Open Cut Trench	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	4.00	367	0.40
Conveyance - Open Cut Trench	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Conveyance - Open Cut Trench	Dumpers/Tenders	Diesel	Average	15.0	10.0	16.0	0.38
Conveyance - Open Cut Trench	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37

Conveyance - Open Cut Trench	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	5.00	376	0.38
Conveyance - Open Cut Trench	Other Construction Equipment	Diesel	Tier 4 Final	8.00	2.00	82.0	0.42
Conveyance - Open Cut Trench	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Tunneling - Outlet and Conveyance	Bore/Drill Rigs	Diesel	Tier 4 Final	3.00	10.0	367	0.40
Tunneling - Outlet and Conveyance	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Tunneling - Outlet and Conveyance	Dumpers/Tenders	Diesel	Average	8.00	10.0	16.0	0.38
Tunneling - Outlet and Conveyance	Other Construction Equipment	Diesel	Tier 4 Final	9.00	5.00	82.0	0.42
Tunneling - Outlet and Conveyance	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Tunneling - Outlet and Conveyance	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Dam Facilities - Spillway	Dumpers/Tenders	Diesel	Tier 4 Final	1.00	20.0	16.0	0.38
Dam Facilities - Spillway	Excavators	Diesel	Tier 4 Final	2.00	20.0	36.0	0.38
Dam Facilities - Site Restoration	Dumpers/Tenders	Diesel	Tier 4 Final	4.00	20.0	16.0	0.38
Dam Facilities - Site Restoration	Graders	Diesel	Tier 4 Final	2.00	20.0	148	0.41
Dam Facilities - Site Restoration	Plate Compactors	Diesel	Tier 4 Final	1.00	20.0	8.00	0.43
Dam Facilities - Site Restoration	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.00	20.0	84.0	0.37
Pumping Plant	Excavators	Diesel	Tier 4 Final	2.00	6.00	36.0	0.38
Pumping Plant	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	6.00	367	0.40
Pumping Plant	Off-Highway Trucks	Diesel	Tier 4 Final	6.00	6.00	376	0.38
Pumping Plant	Dumpers/Tenders	Diesel	Average	6.00	6.00	16.0	0.38

Pumping Plant	Tractors/Loaders/Back	Diesel	Tier 4 Final	4.00	5.00	84.0	0.37
Pumping Plant	Rollers	Diesel	Tier 4 Final	4.00	6.00	36.0	0.38
Pumping Plant	Graders	Diesel	Tier 4 Final	2.00	6.00	148	0.41
Pumping Plant	Pavers	Diesel	Tier 4 Final	1.00	6.00	81.0	0.42
Pumping Plant	Cranes	Diesel	Tier 4 Final	2.00	6.00	367	0.29

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Dam Facilities - Site Preparation	—	—	—	—
Dam Facilities - Site Preparation	Worker	12.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Site Preparation	Vendor	2.00	75.0	HHDT,MHDT
Dam Facilities - Site Preparation	Hauling	0.00	20.0	HHDT
Dam Facilities - Site Preparation	Onsite truck	—	—	HHDT
Dam Facilities - Main Dam	—	—	—	—
Dam Facilities - Main Dam	Worker	12.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Main Dam	Vendor	25.0	75.0	HHDT,MHDT
Dam Facilities - Main Dam	Hauling	0.00	20.0	HHDT
Dam Facilities - Main Dam	Onsite truck	—	—	HHDT
Dam Facilities - Saddle Dams	—	—	—	—
Dam Facilities - Saddle Dams	Worker	8.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Saddle Dams	Vendor	25.0	75.0	HHDT,MHDT
Dam Facilities - Saddle Dams	Hauling	0.00	20.0	HHDT
Dam Facilities - Saddle Dams	Onsite truck	—	—	HHDT
Dam Facilities - Outlet Works	—	—	—	—
Dam Facilities - Outlet Works	Worker	2.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Outlet Works	Vendor	21.0	75.0	HHDT,MHDT

Dam Facilities - Outlet Works	Hauling	0.00	20.0	HHDT
Dam Facilities - Outlet Works	Onsite truck	—	—	HHDT
Conveyance - Open Cut Trench	—	—	—	—
Conveyance - Open Cut Trench	Worker	50.0	30.0	LDA,LDT1,LDT2
Conveyance - Open Cut Trench	Vendor	8.00	75.0	HHDT,MHDT
Conveyance - Open Cut Trench	Hauling	5.58	75.0	HHDT
Conveyance - Open Cut Trench	Onsite truck	—	—	HHDT
Tunneling - Outlet and Conveyance	—	—	—	—
Tunneling - Outlet and Conveyance	Worker	32.0	30.0	LDA,LDT1,LDT2
Tunneling - Outlet and Conveyance	Vendor	0.00	7.17	HHDT,MHDT
Tunneling - Outlet and Conveyance	Hauling	0.00	20.0	HHDT
Tunneling - Outlet and Conveyance	Onsite truck	—	—	HHDT
Dam Facilities - Spillway	—	—	—	—
Dam Facilities - Spillway	Worker	3.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Spillway	Vendor	16.0	75.0	HHDT,MHDT
Dam Facilities - Spillway	Hauling	208	20.0	HHDT
Dam Facilities - Spillway	Onsite truck	—	—	HHDT
Dam Facilities - Site Restoration	—	—	—	—
Dam Facilities - Site Restoration	Worker	6.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Site Restoration	Vendor	9.00	75.0	HHDT,MHDT
Dam Facilities - Site Restoration	Hauling	0.00	20.0	HHDT
Dam Facilities - Site Restoration	Onsite truck	—	—	HHDT
Pumping Plant	—	—	—	—
Pumping Plant	Worker	47.0	30.0	LDA,LDT1,LDT2
Pumping Plant	Vendor	0.00	7.17	HHDT,MHDT
Pumping Plant	Hauling	1.43	20.0	HHDT
Pumping Plant	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Dam Facilities - Site Preparation	—	—	—	—
Dam Facilities - Site Preparation	Worker	12.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Site Preparation	Vendor	2.00	75.0	HHDT,MHDT
Dam Facilities - Site Preparation	Hauling	0.00	20.0	HHDT
Dam Facilities - Site Preparation	Onsite truck	—	—	HHDT
Dam Facilities - Main Dam	—	—	—	—
Dam Facilities - Main Dam	Worker	12.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Main Dam	Vendor	25.0	75.0	HHDT,MHDT
Dam Facilities - Main Dam	Hauling	0.00	20.0	HHDT
Dam Facilities - Main Dam	Onsite truck	—	—	HHDT
Dam Facilities - Saddle Dams	—	—	—	—
Dam Facilities - Saddle Dams	Worker	8.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Saddle Dams	Vendor	25.0	75.0	HHDT,MHDT
Dam Facilities - Saddle Dams	Hauling	0.00	20.0	HHDT
Dam Facilities - Saddle Dams	Onsite truck	—	—	HHDT
Dam Facilities - Outlet Works	—	—	—	—
Dam Facilities - Outlet Works	Worker	2.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Outlet Works	Vendor	21.0	75.0	HHDT,MHDT
Dam Facilities - Outlet Works	Hauling	0.00	20.0	HHDT
Dam Facilities - Outlet Works	Onsite truck	—	—	HHDT
Conveyance - Open Cut Trench	—	—	—	—
Conveyance - Open Cut Trench	Worker	50.0	30.0	LDA,LDT1,LDT2
Conveyance - Open Cut Trench	Vendor	8.00	75.0	HHDT,MHDT
Conveyance - Open Cut Trench	Hauling	5.58	75.0	HHDT
Conveyance - Open Cut Trench	Onsite truck	—	—	HHDT
Tunneling - Outlet and Conveyance	—	—	—	—

Tunneling - Outlet and Conveyance	Worker	32.0	30.0	LDA,LDT1,LDT2
Tunneling - Outlet and Conveyance	Vendor	0.00	7.17	HHDT,MHDT
Tunneling - Outlet and Conveyance	Hauling	0.00	20.0	HHDT
Tunneling - Outlet and Conveyance	Onsite truck	—	—	HHDT
Dam Facilities - Spillway	—	—	—	—
Dam Facilities - Spillway	Worker	3.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Spillway	Vendor	16.0	75.0	HHDT,MHDT
Dam Facilities - Spillway	Hauling	208	20.0	HHDT
Dam Facilities - Spillway	Onsite truck	—	—	HHDT
Dam Facilities - Site Restoration	—	—	—	—
Dam Facilities - Site Restoration	Worker	6.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Site Restoration	Vendor	9.00	75.0	HHDT,MHDT
Dam Facilities - Site Restoration	Hauling	0.00	20.0	HHDT
Dam Facilities - Site Restoration	Onsite truck	—	—	HHDT
Pumping Plant	—	—	—	—
Pumping Plant	Worker	47.0	30.0	LDA,LDT1,LDT2
Pumping Plant	Vendor	0.00	7.17	HHDT,MHDT
Pumping Plant	Hauling	1.43	20.0	HHDT
Pumping Plant	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%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

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)
Pumping Plant	0.00	0.00	0.00	9,768	—
Tunneling - Outlet and Conveyance	0.00	0.00	0.00	813	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Dam Facilities - Site Preparation	0.00	0.00	70.0	0.00	—
Dam Facilities - Main Dam	0.00	0.00	711	0.00	—
Dam Facilities - Saddle Dams	0.00	0.00	0.00	0.00	—
Dam Facilities - Outlet Works	0.00	0.00	0.00	0.00	—
Conveyance - Open Cut Trench	0.00	18,441	51.0	0.00	—
Tunneling - Outlet and Conveyance	0.00	0.00	0.00	0.00	—
Dam Facilities - Spillway	420,000	0.00	0.00	0.00	—
Dam Facilities - Site Restoration	0.00	0.00	83.8	0.00	—
Pumping Plant	6,500	5,300	426	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%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Refrigerated Warehouse-No Rail	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
2026	0.00	609	0.24	0.34
2027	0.00	609	0.24	0.34
2028	0.00	609	0.24	0.34

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMt/Weekday	VMt/Saturday	VMt/Sunday	VMt/Year
Refrigerated Warehouse-No Rail	165	165	165	60,288	1,746	1,746	1,746	637,332

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMt/Weekday	VMt/Saturday	VMt/Sunday	VMt/Year
Refrigerated Warehouse-No Rail	165	165	165	60,288	1,746	1,746	1,746	637,332

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

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)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Refrigerated Warehouse-No Rail	11,870,338	609	0.2373	0.3390	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

Refrigerated Warehouse-No Rail	11,870,338	609	0.2373	0.3390	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

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
Grazing	Inceptisols	620	0.00

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Grazing	Inceptisols	620	0.00

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Grassland	620	0.00

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Grassland	620	0.00

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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	21.9	annual days of extreme heat
Extreme Precipitation	1.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	24.6	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 $\frac{3}{4}$ 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	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	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	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	62.8

AQ-PM	43.6
AQ-DPM	13.0
Drinking Water	98.3
Lead Risk Housing	53.0
Pesticides	88.0
Toxic Releases	14.7
Traffic	19.1
Effect Indicators	—
CleanUp Sites	88.5
Groundwater	92.1
Haz Waste Facilities/Generators	94.3
Impaired Water Bodies	100
Solid Waste	96.6
Sensitive Population	—
Asthma	38.7
Cardio-vascular	53.7
Low Birth Weights	27.9
Socioeconomic Factor Indicators	—
Education	83.8
Housing	12.3
Linguistic	57.8
Poverty	65.1
Unemployment	83.2

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	26.10034646
Employed	7.686385218
Median HI	23.99589375
Education	—
Bachelor's or higher	25.84370589
High school enrollment	11.18952906
Preschool enrollment	44.32182728
Transportation	—
Auto Access	83.51084306
Active commuting	40.60053895
Social	—
2-parent households	38.16245348
Voting	45.98999102
Neighborhood	—
Alcohol availability	81.80418324
Park access	10.09880662
Retail density	1.257538817
Supermarket access	11.84396253
Tree canopy	72.5907866
Housing	—
Homeownership	45.09174901
Housing habitability	58.89901193
Low-inc homeowner severe housing cost burden	60.91364045
Low-inc renter severe housing cost burden	53.57372001
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	28.16630309
Arthritis	0.0

Asthma ER Admissions	53.1
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	20.2
Cognitively Disabled	33.5
Physically Disabled	78.7
Heart Attack ER Admissions	33.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	41.4
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	0.1
SLR Inundation Area	0.0
Children	35.2
Elderly	70.0
English Speaking	15.8
Foreign-born	55.0

Outdoor Workers	4.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	94.7
Traffic Density	15.9
Traffic Access	0.0
Other Indices	—
Hardship	77.3
Other Decision Support	—
2016 Voting	64.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	76.0
Healthy Places Index Score for Project Location (b)	21.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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: Construction Phases	Per project description
Construction: Off-Road Equipment	Per Project Description
Construction: Trips and VMT	Per project description
Construction: Architectural Coatings	Per project description
Operations: Vehicle Data	Per project description
Operations: Energy Use	Per project description
Operations: Landscape Equipment	Per project description
Operations: Architectural Coatings	Per project description
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DCPR Ingram_V1 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	DCPR Ingram_V1
Construction Start Date	3/2/2026
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.10
Precipitation (days)	6.60
Location	37.524374, -121.298611
County	Stanislaus
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2208
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Refrigerated Warehouse-No Rail	19,009	1000sqft	436	19,009,230	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	69.2	58.0	484	469	1.26	19.8	72.4	92.3	18.3	32.6	50.9	—	142,620	142,620	5.28	6.57	83.3	144,783
Mit.	16.9	15.9	122	648	1.26	3.53	72.4	76.0	3.45	32.6	36.0	—	142,620	142,620	5.28	6.57	83.3	144,783
% Reduced	76%	73%	75%	-38%	—	82%	—	18%	81%	—	29%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	69.1	57.9	485	465	1.26	19.8	72.4	92.3	18.3	32.6	50.9	—	139,800	139,800	5.29	5.52	1.72	140,884
Mit.	16.9	15.8	105	644	1.26	3.53	72.4	76.0	3.45	32.6	36.0	—	139,800	139,800	5.29	5.52	1.72	140,884
% Reduced	76%	73%	78%	-38%	—	82%	—	18%	81%	—	29%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.0	33.5	271	270	0.82	10.8	42.3	52.6	9.95	18.2	27.6	—	93,442	93,442	3.29	3.66	19.4	94,636
Mit.	10.3	9.62	75.8	384	0.82	2.21	42.3	44.5	2.17	18.2	20.3	—	93,442	93,442	3.29	3.66	19.4	94,636
% Reduced	74%	71%	72%	-42%	—	79%	—	15%	78%	—	26%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.30	6.12	49.4	49.3	0.15	1.97	7.72	9.59	1.82	3.31	5.04	—	15,470	15,470	0.55	0.61	3.22	15,668
Mit.	1.87	1.76	13.8	70.1	0.15	0.40	7.72	8.12	0.40	3.31	3.71	—	15,470	15,470	0.55	0.61	3.22	15,668
% Reduced	74%	71%	72%	-42%	—	79%	—	15%	78%	—	26%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	69.2	58.0	484	469	1.26	19.8	72.4	92.3	18.3	32.6	50.9	—	140,022	140,022	5.28	3.19	43.8	141,147
2027	56.3	47.1	380	381	1.09	15.2	56.4	71.6	14.0	24.7	38.7	—	121,059	121,059	4.46	3.21	43.5	122,171
2028	57.0	47.4	394	391	1.24	15.1	62.5	77.6	13.9	26.4	40.3	—	142,620	142,620	4.85	6.57	83.3	144,783
2029	53.5	44.5	350	371	1.17	13.6	59.5	73.0	12.5	25.1	37.6	—	132,190	132,190	4.65	5.41	60.6	133,981
2030	2.81	2.35	17.1	26.9	0.04	0.78	1.19	1.96	0.72	0.15	0.86	—	4,415	4,415	0.18	0.04	0.39	4,430
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	69.1	57.9	485	465	1.26	19.8	72.4	92.3	18.3	32.6	50.9	—	139,800	139,800	5.29	3.19	1.13	140,884
2027	56.2	47.0	381	378	1.09	15.2	56.4	71.6	14.0	24.7	38.7	—	120,845	120,845	4.47	3.21	1.13	121,916
2028	55.2	46.3	365	376	1.13	14.5	58.3	71.8	13.4	25.0	38.1	—	128,512	128,512	4.49	5.52	1.72	130,271
2029	50.5	42.0	335	343	1.13	12.8	58.3	71.0	11.8	25.0	36.8	—	127,693	127,693	4.48	5.38	1.56	129,408
2030	2.80	2.35	17.1	26.7	0.04	0.78	1.19	1.96	0.72	0.15	0.86	—	4,399	4,399	0.18	0.04	0.01	4,416
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	35.4	29.6	247	237	0.66	10.0	34.8	44.8	9.22	15.4	24.6	—	73,092	73,092	2.74	1.79	11.0	73,706
2027	40.0	33.5	271	270	0.77	10.8	40.1	50.9	9.95	17.6	27.6	—	85,612	85,612	3.18	2.20	12.8	86,360
2028	39.1	32.6	266	266	0.82	10.3	42.3	52.6	9.48	18.2	27.6	—	93,442	93,442	3.29	3.66	19.4	94,636

2029	26.6	22.1	173	183	0.57	6.76	29.7	36.5	6.24	12.7	19.0	—	64,247	64,247	2.30	2.38	11.2	65,024
2030	0.99	0.83	6.05	9.47	0.01	0.28	0.42	0.70	0.25	0.05	0.31	—	1,560	1,560	0.06	0.01	0.06	1,565
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.46	5.41	45.0	43.3	0.12	1.83	6.35	8.18	1.68	2.81	4.49	—	12,101	12,101	0.45	0.30	1.82	12,203
2027	7.30	6.12	49.4	49.3	0.14	1.97	7.32	9.29	1.82	3.21	5.03	—	14,174	14,174	0.53	0.36	2.11	14,298
2028	7.13	5.94	48.6	48.5	0.15	1.88	7.72	9.59	1.73	3.31	5.04	—	15,470	15,470	0.55	0.61	3.22	15,668
2029	4.85	4.04	31.6	33.3	0.10	1.23	5.43	6.66	1.14	2.32	3.46	—	10,637	10,637	0.38	0.39	1.85	10,766
2030	0.18	0.15	1.10	1.73	< 0.005	0.05	0.08	0.13	0.05	0.01	0.06	—	258	258	0.01	< 0.005	0.01	259

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	16.9	15.9	103	648	1.26	3.53	72.4	76.0	3.45	32.6	36.0	—	140,022	140,022	5.28	3.19	43.8	141,147
2027	14.7	13.7	94.3	541	1.09	3.06	56.4	59.5	2.98	24.7	27.7	—	121,059	121,059	4.46	3.21	43.5	122,171
2028	15.5	14.2	122	552	1.24	3.49	62.5	66.0	3.42	26.4	29.8	—	142,620	142,620	4.85	6.57	83.3	144,783
2029	13.0	12.0	100	532	1.17	2.89	59.5	62.4	2.86	25.1	28.0	—	132,190	132,190	4.65	5.41	60.6	133,981
2030	0.51	0.49	2.41	26.1	0.04	0.09	1.19	1.28	0.09	0.15	0.24	—	4,415	4,415	0.18	0.04	0.39	4,430
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	16.9	15.8	105	644	1.26	3.53	72.4	76.0	3.45	32.6	36.0	—	139,800	139,800	5.29	3.19	1.13	140,884
2027	14.5	13.6	95.4	538	1.09	3.06	56.4	59.5	2.98	24.7	27.7	—	120,845	120,845	4.47	3.21	1.13	121,916
2028	14.4	13.5	101	537	1.13	3.06	58.3	61.1	2.98	25.0	27.7	—	128,512	128,512	4.49	5.52	1.72	130,271
2029	12.5	11.5	100	505	1.13	2.80	58.3	61.1	2.77	25.0	27.7	—	127,693	127,693	4.48	5.38	1.56	129,408
2030	0.50	0.48	2.42	26.0	0.04	0.09	1.19	1.28	0.09	0.15	0.24	—	4,399	4,399	0.18	0.04	0.01	4,416
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	9.00	8.41	56.9	333	0.66	1.87	34.8	36.7	1.83	15.4	17.2	—	73,092	73,092	2.74	1.79	11.0	73,706
2027	10.3	9.62	66.6	384	0.77	2.15	40.1	42.2	2.10	17.6	19.7	—	85,612	85,612	3.18	2.20	12.8	86,360
2028	10.0	9.26	75.8	380	0.82	2.21	42.3	44.5	2.17	18.2	20.3	—	93,442	93,442	3.29	3.66	19.4	94,636
2029	6.34	5.89	47.5	265	0.57	1.40	29.7	31.1	1.39	12.7	14.1	—	64,247	64,247	2.30	2.38	11.2	65,024
2030	0.18	0.17	0.86	9.20	0.01	0.03	0.42	0.45	0.03	0.05	0.08	—	1,560	1,560	0.06	0.01	0.06	1,565
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.64	1.53	10.4	60.7	0.12	0.34	6.35	6.69	0.33	2.81	3.14	—	12,101	12,101	0.45	0.30	1.82	12,203
2027	1.87	1.76	12.1	70.1	0.14	0.39	7.32	7.71	0.38	3.21	3.60	—	14,174	14,174	0.53	0.36	2.11	14,298
2028	1.83	1.69	13.8	69.4	0.15	0.40	7.72	8.12	0.40	3.31	3.71	—	15,470	15,470	0.55	0.61	3.22	15,668
2029	1.16	1.08	8.67	48.4	0.10	0.26	5.43	5.68	0.25	2.32	2.57	—	10,637	10,637	0.38	0.39	1.85	10,766
2030	0.03	0.03	0.16	1.68	< 0.005	0.01	0.08	0.08	0.01	0.01	0.02	—	258	258	0.01	< 0.005	0.01	259

2.4. Operations 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.	407	407	0.42	3.89	0.01	0.01	0.86	0.87	0.01	0.22	0.23	0.00	23,520	23,520	3.05	0.41	2.76	23,721
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	407	407	0.48	3.25	0.01	0.01	0.86	0.87	0.01	0.22	0.23	0.00	23,444	23,444	3.05	0.41	0.07	23,643
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	407	407	0.45	3.30	0.01	0.01	0.86	0.86	0.01	0.22	0.22	0.00	23,463	23,463	3.05	0.41	1.19	23,663
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	74.3	74.3	0.08	0.60	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	0.00	3,885	3,885	0.50	0.07	0.20	3,918

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.47	0.44	0.42	3.89	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	963	963	0.03	0.04	2.76	979
Area	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	18,616	18,616	3.01	0.37	—	18,800
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	3,941	3,941	—	—	—	3,941
Total	407	407	0.42	3.89	0.01	0.01	0.86	0.87	0.01	0.22	0.23	0.00	23,520	23,520	3.05	0.41	2.76	23,721
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.43	0.40	0.48	3.25	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	887	887	0.04	0.05	0.07	902
Area	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	18,616	18,616	3.01	0.37	—	18,800
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	3,941	3,941	—	—	—	3,941
Total	407	407	0.48	3.25	0.01	0.01	0.86	0.87	0.01	0.22	0.23	0.00	23,444	23,444	3.05	0.41	0.07	23,643
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.44	0.40	0.45	3.30	0.01	0.01	0.86	0.86	0.01	0.22	0.22	—	906	906	0.04	0.04	1.19	921
Area	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	18,616	18,616	3.01	0.37	—	18,800

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	3,941	3,941	—	—	—	3,941
Total	407	407	0.45	3.30	0.01	0.01	0.86	0.86	0.01	0.22	0.22	0.00	23,463	23,463	3.05	0.41	1.19	23,663
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.08	0.07	0.08	0.60	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	—	150	150	0.01	0.01	0.20	153
Area	74.2	74.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,082	3,082	0.50	0.06	—	3,113
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	653	653	—	—	—	653
Total	74.3	74.3	0.08	0.60	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	0.00	3,885	3,885	0.50	0.07	0.20	3,918

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.47	0.44	0.42	3.89	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	963	963	0.03	0.04	2.76	979
Area	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	18,616	18,616	3.01	0.37	—	18,800
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	3,941	3,941	—	—	—	3,941
Total	407	407	0.42	3.89	0.01	0.01	0.86	0.87	0.01	0.22	0.23	0.00	23,520	23,520	3.05	0.41	2.76	23,721

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.43	0.40	0.48	3.25	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	887	887	0.04	0.05	0.07	902
Area	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	18,616	18,616	3.01	0.37	—	18,800
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	3,941	3,941	—	—	—	3,941
Total	407	407	0.48	3.25	0.01	0.01	0.86	0.87	0.01	0.22	0.23	0.00	23,444	23,444	3.05	0.41	0.07	23,643
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.44	0.40	0.45	3.30	0.01	0.01	0.86	0.86	0.01	0.22	0.22	—	906	906	0.04	0.04	1.19	921
Area	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	18,616	18,616	3.01	0.37	—	18,800
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	3,941	3,941	—	—	—	3,941
Total	407	407	0.45	3.30	0.01	0.01	0.86	0.86	0.01	0.22	0.22	0.00	23,463	23,463	3.05	0.41	1.19	23,663
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.08	0.07	0.08	0.60	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	—	150	150	0.01	0.01	0.20	153
Area	74.2	74.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,082	3,082	0.50	0.06	—	3,113
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	653	653	—	—	—	653
Total	74.3	74.3	0.08	0.60	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	0.00	3,885	3,885	0.50	0.07	0.20	3,918

3. Construction Emissions Details

3.1. Dam Facilities - Site Preparation (2026) - 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	16.6	13.9	115	114	0.27	4.90	—	4.90	4.51	—	4.51	—	28,990	28,990	1.18	0.24	—	29,089
Dust From Material Movement	—	—	—	—	—	—	20.7	20.7	—	10.0	10.0	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	16.6	13.9	115	114	0.27	4.90	—	4.90	4.51	—	4.51	—	28,990	28,990	1.18	0.24	—	29,089
Dust From Material Movement	—	—	—	—	—	—	20.7	20.7	—	10.0	10.0	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.00	1.68	13.9	13.8	0.03	0.59	—	0.59	0.54	—	0.54	—	3,495	3,495	0.14	0.03	—	3,507
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	1.21	1.21	—	—	—	—	—	—	—
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	0.36	0.31	2.53	2.51	0.01	0.11	—	0.11	0.10	—	0.10	—	579	579	0.02	< 0.005	—	581
Dust From Material Movement	—	—	—	—	—	—	0.46	0.46	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	1.49	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	264	264	< 0.005	0.01	1.00	267
Vendor	0.01	0.01	0.42	0.09	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	444	444	0.01	0.07	1.15	465
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.09	1.01	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	235	235	< 0.005	0.01	0.03	238
Vendor	0.01	0.01	0.45	0.08	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	444	444	0.01	0.07	0.03	464
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.2	29.2	< 0.005	< 0.005	0.05	29.6

Vendor	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	53.5	53.5	< 0.005	0.01	0.06	56.0
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	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.83	4.83	< 0.005	< 0.005	0.01	4.90
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.86	8.86	< 0.005	< 0.005	0.01	9.27
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

3.2. Dam Facilities - Site Preparation (2026) - Mitigated

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	3.00	2.95	15.9	150	0.27	0.61	—	0.61	0.60	—	0.60	—	28,990	28,990	1.18	0.24	—	29,089
Dust From Material Movement	—	—	—	—	—	—	20.7	20.7	—	10.0	10.0	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.00	2.95	15.9	150	0.27	0.61	—	0.61	0.60	—	0.60	—	28,990	28,990	1.18	0.24	—	29,089

Dust From Material Movement	—	—	—	—	—	—	20.7	20.7	—	10.0	10.0	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.36	1.92	18.0	0.03	0.07	—	0.07	0.07	—	0.07	—	3,495	3,495	0.14	0.03	—	3,507
Dust From Material Movement	—	—	—	—	—	—	2.50	2.50	—	1.21	1.21	—	—	—	—	—	—	—
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	0.07	0.06	0.35	3.29	0.01	0.01	—	0.01	0.01	—	0.01	—	579	579	0.02	< 0.005	—	581
Dust From Material Movement	—	—	—	—	—	—	0.46	0.46	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	1.49	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	264	264	< 0.005	0.01	1.00	267
Vendor	0.01	0.01	0.42	0.09	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	444	444	0.01	0.07	1.15	465
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.09	1.01	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	235	235	< 0.005	0.01	0.03	238
Vendor	0.01	0.01	0.45	0.08	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	444	444	0.01	0.07	0.03	464
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	29.2	29.2	< 0.005	< 0.005	0.05	29.6
Vendor	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	53.5	53.5	< 0.005	0.01	0.06	56.0
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	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.83	4.83	< 0.005	< 0.005	0.01	4.90
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.86	8.86	< 0.005	< 0.005	0.01	9.27
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. Dam Facilities - Main Dam (2026) - 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	44.5	37.3	304	289	0.79	12.5	—	12.5	11.5	—	11.5	—	84,433	84,433	3.42	0.68	—	84,723
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	44.5	37.3	304	289	0.79	12.5	—	12.5	11.5	—	11.5	—	84,433	84,433	3.42	0.68	—	84,723
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	26.5	22.3	182	173	0.47	7.44	—	7.44	6.84	—	6.84	—	50,395	50,395	2.04	0.41	—	50,568
Dust From Material Movement	—	—	—	—	—	—	26.6	26.6	—	12.2	12.2	—	—	—	—	—	—	—
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	4.84	4.07	33.1	31.5	0.09	1.36	—	1.36	1.25	—	1.25	—	8,344	8,344	0.34	0.07	—	8,372
Dust From Material Movement	—	—	—	—	—	—	4.85	4.85	—	2.22	2.22	—	—	—	—	—	—	—
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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	1.49	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	264	264	< 0.005	0.01	1.00	267
Vendor	0.31	0.16	8.77	1.82	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	9,324	9,324	0.15	1.40	24.2	9,768
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.09	1.01	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	235	235	< 0.005	0.01	0.03	238
Vendor	0.30	0.16	9.42	1.77	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	9,325	9,325	0.15	1.40	0.63	9,745
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.05	0.66	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	145	145	< 0.005	0.01	0.26	146
Vendor	0.18	0.10	5.49	1.05	0.04	0.08	1.57	1.65	0.08	0.43	0.52	—	5,565	5,565	0.09	0.83	6.22	5,822
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.9	23.9	< 0.005	< 0.005	0.04	24.2
Vendor	0.03	0.02	1.00	0.19	0.01	0.02	0.29	0.30	0.02	0.08	0.09	—	921	921	0.01	0.14	1.03	964
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

3.4. Dam Facilities - Main Dam (2026) - Mitigated

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	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,433	84,433	3.42	0.68	—	84,723
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,433	84,433	3.42	0.68	—	84,723
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.51	5.37	30.3	253	0.47	1.13	—	1.13	1.11	—	1.11	—	50,395	50,395	2.04	0.41	—	50,568
Dust From Material Movement	—	—	—	—	—	—	26.6	26.6	—	12.2	12.2	—	—	—	—	—	—	—
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	1.00	0.98	5.53	46.1	0.09	0.21	—	0.21	0.20	—	0.20	—	8,344	8,344	0.34	0.07	—	8,372

Dust From Material Movement	—	—	—	—	—	—	4.85	4.85	—	2.22	2.22	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	1.49	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	264	264	< 0.005	0.01	1.00	267
Vendor	0.31	0.16	8.77	1.82	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	9,324	9,324	0.15	1.40	24.2	9,768
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.09	1.01	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	235	235	< 0.005	0.01	0.03	238
Vendor	0.30	0.16	9.42	1.77	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	9,325	9,325	0.15	1.40	0.63	9,745
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.05	0.66	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	145	145	< 0.005	0.01	0.26	146
Vendor	0.18	0.10	5.49	1.05	0.04	0.08	1.57	1.65	0.08	0.43	0.52	—	5,565	5,565	0.09	0.83	6.22	5,822
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.9	23.9	< 0.005	< 0.005	0.04	24.2
Vendor	0.03	0.02	1.00	0.19	0.01	0.02	0.29	0.30	0.02	0.08	0.09	—	921	921	0.01	0.14	1.03	964
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. Dam Facilities - Main Dam (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	43.5	36.5	288	285	0.78	11.7	—	11.7	10.8	—	10.8	—	84,416	84,416	3.42	0.68	—	84,706
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	43.5	36.5	288	285	0.78	11.7	—	11.7	10.8	—	10.8	—	84,416	84,416	3.42	0.68	—	84,706
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	31.1	26.1	206	204	0.56	8.38	—	8.38	7.71	—	7.71	—	60,297	60,297	2.45	0.49	—	60,504
Dust From Material Movement	—	—	—	—	—	—	31.8	31.8	—	14.5	14.5	—	—	—	—	—	—	—

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 Equipm ent	5.67	4.76	37.5	37.2	0.10	1.53	—	1.53	1.41	—	1.41	—	9,983	9,983	0.40	0.08	—	10,017
Dust From Material Movemer	—	—	—	—	—	—	5.81	5.81	—	2.66	2.66	—	—	—	—	—	—	—
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	0.07	0.06	0.06	1.34	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	258	258	< 0.005	0.01	0.90	262
Vendor	0.31	0.16	8.35	1.68	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	9,125	9,125	0.15	1.33	21.5	9,545
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.08	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	230	230	< 0.005	0.01	0.02	233
Vendor	0.30	0.16	8.93	1.70	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	9,126	9,126	0.15	1.33	0.56	9,525
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.71	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	169	169	< 0.005	0.01	0.28	172
Vendor	0.22	0.11	6.22	1.21	0.05	0.10	1.88	1.98	0.10	0.52	0.62	—	6,518	6,518	0.10	0.95	6.62	6,810
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	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.05	28.4

Vendor	0.04	0.02	1.13	0.22	0.01	0.02	0.34	0.36	0.02	0.09	0.11	—	1,079	1,079	0.02	0.16	1.10	1,127
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

3.6. Dam Facilities - Main Dam (2027) - Mitigated

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	9.22	8.99	50.8	423	0.78	1.89	—	1.89	1.87	—	1.87	—	84,416	84,416	3.42	0.68	—	84,706
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	9.22	8.99	50.8	423	0.78	1.89	—	1.89	1.87	—	1.87	—	84,416	84,416	3.42	0.68	—	84,706
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	6.59	6.42	36.3	302	0.56	1.35	—	1.35	1.33	—	1.33	—	60,297	60,297	2.45	0.49	—	60,504
Dust From Material Movement	—	—	—	—	—	—	31.8	31.8	—	14.5	14.5	—	—	—	—	—	—	—
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	1.20	1.17	6.62	55.2	0.10	0.25	—	0.25	0.24	—	0.24	—	9,983	9,983	0.40	0.08	—	10,017
Dust From Material Movement	—	—	—	—	—	—	5.81	5.81	—	2.66	2.66	—	—	—	—	—	—	—
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	0.07	0.06	0.06	1.34	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	258	258	< 0.005	0.01	0.90	262
Vendor	0.31	0.16	8.35	1.68	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	9,125	9,125	0.15	1.33	21.5	9,545
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.08	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	230	230	< 0.005	0.01	0.02	233
Vendor	0.30	0.16	8.93	1.70	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	9,126	9,126	0.15	1.33	0.56	9,525
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.71	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	169	169	< 0.005	0.01	0.28	172

Vendor	0.22	0.11	6.22	1.21	0.05	0.10	1.88	1.98	0.10	0.52	0.62	—	6,518	6,518	0.10	0.95	6.62	6,810
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	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.05	28.4
Vendor	0.04	0.02	1.13	0.22	0.01	0.02	0.34	0.36	0.02	0.09	0.11	—	1,079	1,079	0.02	0.16	1.10	1,127
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. Dam Facilities - Main Dam (2028) - 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	42.9	36.0	275	284	0.79	11.2	—	11.2	10.3	—	10.3	—	84,437	84,437	3.43	0.69	—	84,726
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	42.9	36.0	275	284	0.79	11.2	—	11.2	10.3	—	10.3	—	84,437	84,437	3.43	0.69	—	84,726

Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	30.7	25.8	197	203	0.56	8.04	—	8.04	7.40	—	7.40	—	60,477	60,477	2.45	0.49	—	60,685
Dust From Material Movement	—	—	—	—	—	—	31.9	31.9	—	14.6	14.6	—	—	—	—	—	—	—
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	5.61	4.71	36.0	37.1	0.10	1.47	—	1.47	1.35	—	1.35	—	10,013	10,013	0.41	0.08	—	10,047
Dust From Material Movement	—	—	—	—	—	—	5.82	5.82	—	2.66	2.66	—	—	—	—	—	—	—
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	0.06	1.25	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.82	257
Vendor	0.24	0.16	7.93	1.54	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	8,899	8,899	0.15	1.33	19.0	9,317
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.07	0.85	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	225	225	< 0.005	0.01	0.02	228
Vendor	0.24	0.16	8.44	1.56	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	8,899	8,899	0.15	1.33	0.49	9,299
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.05	0.67	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.25	169
Vendor	0.17	0.11	5.93	1.11	0.05	0.10	1.89	1.99	0.10	0.52	0.62	—	6,374	6,374	0.10	0.95	5.88	6,665
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.6	27.6	< 0.005	< 0.005	0.04	27.9
Vendor	0.03	0.02	1.08	0.20	0.01	0.02	0.34	0.36	0.02	0.10	0.11	—	1,055	1,055	0.02	0.16	0.97	1,104
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

3.8. Dam Facilities - Main Dam (2028) - Mitigated

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	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,437	84,437	3.43	0.69	—	84,726
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,437	84,437	3.43	0.69	—	84,726
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.61	6.44	36.4	303	0.56	1.36	—	1.36	1.34	—	1.34	—	60,477	60,477	2.45	0.49	—	60,685
Dust From Material Movement	—	—	—	—	—	—	31.9	31.9	—	14.6	14.6	—	—	—	—	—	—	—
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	1.21	1.18	6.64	55.3	0.10	0.25	—	0.25	0.24	—	0.24	—	10,013	10,013	0.41	0.08	—	10,047
Dust From Material Movement	—	—	—	—	—	—	5.82	5.82	—	2.66	2.66	—	—	—	—	—	—	—
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	0.06	1.25	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.82	257
Vendor	0.24	0.16	7.93	1.54	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	8,899	8,899	0.15	1.33	19.0	9,317
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.07	0.85	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	225	225	< 0.005	0.01	0.02	228
Vendor	0.24	0.16	8.44	1.56	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	8,899	8,899	0.15	1.33	0.49	9,299
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.05	0.67	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.25	169
Vendor	0.17	0.11	5.93	1.11	0.05	0.10	1.89	1.99	0.10	0.52	0.62	—	6,374	6,374	0.10	0.95	5.88	6,665
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	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.6	27.6	< 0.005	< 0.005	0.04	27.9
Vendor	0.03	0.02	1.08	0.20	0.01	0.02	0.34	0.36	0.02	0.10	0.11	—	1,055	1,055	0.02	0.16	0.97	1,104
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. Dam Facilities - Main Dam (2029) - 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	41.9	35.2	257	280	0.79	10.6	—	10.6	9.72	—	9.72	—	84,426	84,426	3.42	0.68	—	84,715
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	41.9	35.2	257	280	0.79	10.6	—	10.6	9.72	—	9.72	—	84,426	84,426	3.42	0.68	—	84,715
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	22.3	18.7	137	149	0.42	5.63	—	5.63	5.18	—	5.18	—	44,939	44,939	1.82	0.36	—	45,093
Dust From Material Movement	—	—	—	—	—	—	23.7	23.7	—	10.8	10.8	—	—	—	—	—	—	—
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	4.07	3.42	25.0	27.2	0.08	1.03	—	1.03	0.94	—	0.94	—	7,440	7,440	0.30	0.06	—	7,466

Dust From Material Movement	—	—	—	—	—	—	4.33	4.33	—	1.98	1.98	—	—	—	—	—	—	—
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	0.05	0.06	1.17	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	248	248	< 0.005	0.01	0.73	252
Vendor	0.24	0.09	7.50	1.47	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	8,654	8,654	0.15	1.33	16.8	9,070
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.79	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	221	221	< 0.005	0.01	0.02	224
Vendor	0.23	0.09	8.01	1.49	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	8,655	8,655	0.15	1.33	0.43	9,055
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.46	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.17	123
Vendor	0.13	0.05	4.18	0.79	0.04	0.07	1.40	1.48	0.07	0.39	0.46	—	4,607	4,607	0.08	0.71	3.85	4,823
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	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.1	20.1	< 0.005	< 0.005	0.03	20.4
Vendor	0.02	0.01	0.76	0.14	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	763	763	0.01	0.12	0.64	798
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

3.10. Dam Facilities - Main Dam (2029) - Mitigated

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	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,426	84,426	3.42	0.68	—	84,715
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	9.22	8.99	50.8	423	0.79	1.89	—	1.89	1.87	—	1.87	—	84,426	84,426	3.42	0.68	—	84,715
Dust From Material Movement	—	—	—	—	—	—	44.5	44.5	—	20.4	20.4	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.91	4.79	27.0	225	0.42	1.01	—	1.01	0.99	—	0.99	—	44,939	44,939	1.82	0.36	—	45,093
Dust From Material Movement	—	—	—	—	—	—	23.7	23.7	—	10.8	10.8	—	—	—	—	—	—	—

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 Equipm ent	0.90	0.87	4.94	41.1	0.08	0.18	—	0.18	0.18	—	0.18	—	7,440	7,440	0.30	0.06	—	7,466
Dust From Material Movemer	—	—	—	—	—	—	4.33	4.33	—	1.98	1.98	—	—	—	—	—	—	—
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	0.05	0.06	1.17	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	248	248	< 0.005	0.01	0.73	252
Vendor	0.24	0.09	7.50	1.47	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	8,654	8,654	0.15	1.33	16.8	9,070
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.79	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	221	221	< 0.005	0.01	0.02	224
Vendor	0.23	0.09	8.01	1.49	0.07	0.14	2.64	2.78	0.14	0.73	0.87	—	8,655	8,655	0.15	1.33	0.43	9,055
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.46	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.17	123
Vendor	0.13	0.05	4.18	0.79	0.04	0.07	1.40	1.48	0.07	0.39	0.46	—	4,607	4,607	0.08	0.71	3.85	4,823
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	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.1	20.1	< 0.005	< 0.005	0.03	20.4

Vendor	0.02	0.01	0.76	0.14	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	763	763	0.01	0.12	0.64	798
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. Dam Facilities - Outlet Works (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	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.16	0.14	1.03	0.56	< 0.005	0.04	—	0.04	0.04	—	0.04	—	136	136	0.01	< 0.005	—	136
Dust From Material Movement	—	—	—	—	—	—	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	0.03	0.02	0.19	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.5	22.5	< 0.005	< 0.005	—	22.5
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.01	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.0	43.0	< 0.005	< 0.005	0.15	43.6
Vendor	0.08	0.04	2.19	0.44	0.02	0.04	0.69	0.73	0.04	0.19	0.23	—	2,390	2,390	0.04	0.35	5.62	2,500
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.3	38.3	< 0.005	< 0.005	< 0.005	38.8
Vendor	0.08	0.04	2.34	0.45	0.02	0.04	0.69	0.73	0.04	0.19	0.23	—	2,390	2,390	0.04	0.35	0.15	2,495
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.5	17.5	< 0.005	< 0.005	0.03	17.7

Vendor	0.04	0.02	1.01	0.20	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,057	1,057	0.02	0.15	1.07	1,104
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	—	2.89	2.89	< 0.005	< 0.005	< 0.005	2.93
Vendor	0.01	< 0.005	0.18	0.04	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	175	175	< 0.005	0.03	0.18	183
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

3.12. Dam Facilities - Outlet Works (2027) - Mitigated

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	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308

Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.03	0.56	< 0.005	0.04	—	0.04	0.04	—	0.04	—	136	136	0.01	< 0.005	—	136
Dust From Material Movement	—	—	—	—	—	—	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	0.03	0.02	0.19	0.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.5	22.5	< 0.005	< 0.005	—	22.5
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.01	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.0	43.0	< 0.005	< 0.005	0.15	43.6
Vendor	0.08	0.04	2.19	0.44	0.02	0.04	0.69	0.73	0.04	0.19	0.23	—	2,390	2,390	0.04	0.35	5.62	2,500
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.3	38.3	< 0.005	< 0.005	< 0.005	38.8
Vendor	0.08	0.04	2.34	0.45	0.02	0.04	0.69	0.73	0.04	0.19	0.23	—	2,390	2,390	0.04	0.35	0.15	2,495
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.5	17.5	< 0.005	< 0.005	0.03	17.7
Vendor	0.04	0.02	1.01	0.20	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,057	1,057	0.02	0.15	1.07	1,104
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	—	2.89	2.89	< 0.005	< 0.005	< 0.005	2.93
Vendor	0.01	< 0.005	0.18	0.04	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	175	175	< 0.005	0.03	0.18	183
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. Dam Facilities - Outlet Works (2028) - 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	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.53	0.29	< 0.005	0.02	—	0.02	0.02	—	0.02	—	69.6	69.6	< 0.005	< 0.005	—	69.9
Dust From Material Movement	—	—	—	—	—	—	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	0.02	0.01	0.10	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.6
Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.01	0.21	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.2	42.2	< 0.005	< 0.005	0.14	42.8
Vendor	0.06	0.04	2.08	0.40	0.02	0.04	0.69	0.73	0.04	0.19	0.23	—	2,331	2,331	0.04	0.35	4.97	2,440
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	37.6	37.6	< 0.005	< 0.005	< 0.005	38.0
Vendor	0.06	0.04	2.21	0.41	0.02	0.04	0.69	0.73	0.04	0.19	0.23	—	2,331	2,331	0.04	0.35	0.13	2,435
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
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	—	8.80	8.80	< 0.005	< 0.005	0.01	8.91
Vendor	0.01	0.01	0.49	0.09	< 0.005	0.01	0.16	0.16	0.01	0.04	0.05	—	529	529	0.01	0.08	0.49	553
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	—	1.46	1.46	< 0.005	< 0.005	< 0.005	1.48
Vendor	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	87.6	87.6	< 0.005	0.01	0.08	91.6
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

3.14. Dam Facilities - Outlet Works (2028) - Mitigated

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	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.34	1.26	< 0.005	0.09	—	0.09	0.08	—	0.08	—	307	307	0.01	< 0.005	—	308
Dust From Material Movement	—	—	—	—	—	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.53	0.29	< 0.005	0.02	—	0.02	0.02	—	0.02	—	69.6	69.6	< 0.005	< 0.005	—	69.9
Dust From Material Movement	—	—	—	—	—	—	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	0.02	0.01	0.10	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.5	11.5	< 0.005	< 0.005	—	11.6

Dust From Material Movement	—	—	—	—	—	—	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	0.01	0.01	0.01	0.21	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.2	42.2	< 0.005	< 0.005	0.14	42.8
Vendor	0.06	0.04	2.08	0.40	0.02	0.04	0.69	0.73	0.04	0.19	0.23	—	2,331	2,331	0.04	0.35	4.97	2,440
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	37.6	37.6	< 0.005	< 0.005	< 0.005	38.0
Vendor	0.06	0.04	2.21	0.41	0.02	0.04	0.69	0.73	0.04	0.19	0.23	—	2,331	2,331	0.04	0.35	0.13	2,435
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
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	—	8.80	8.80	< 0.005	< 0.005	0.01	8.91
Vendor	0.01	0.01	0.49	0.09	< 0.005	0.01	0.16	0.16	0.01	0.04	0.05	—	529	529	0.01	0.08	0.49	553
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	—	1.46	1.46	< 0.005	< 0.005	< 0.005	1.48
Vendor	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	87.6	87.6	< 0.005	0.01	0.08	91.6
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

3.15. Conveyance - Open Cut Trench (2026) - 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	4.67	3.90	34.5	35.1	0.06	1.56	—	1.56	1.44	—	1.44	—	6,309	6,309	0.26	0.05	—	6,331
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.67	3.90	34.5	35.1	0.06	1.56	—	1.56	1.44	—	1.44	—	6,309	6,309	0.26	0.05	—	6,331
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.79	2.33	20.6	21.0	0.04	0.93	—	0.93	0.86	—	0.86	—	3,766	3,766	0.15	0.03	—	3,779
Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.39	0.39	—	—	—	—	—	—	—

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	0.51	0.42	3.75	3.83	0.01	0.17	—	0.17	0.16	—	0.16	—	623	623	0.03	0.01	—	626
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.07	0.07	—	—	—	—	—	—	—
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	0.29	0.26	0.30	6.19	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	1,099	1,099	0.01	0.04	4.15	1,114
Vendor	0.06	0.03	1.67	0.35	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,776	1,776	0.03	0.27	4.62	1,861
Hauling	0.07	0.04	2.57	0.44	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,401	2,401	0.05	0.38	5.74	2,522
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.37	4.21	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	978	978	0.01	0.04	0.11	990
Vendor	0.06	0.03	1.79	0.34	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,776	1,776	0.03	0.27	0.12	1,856
Hauling	0.07	0.04	2.73	0.44	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,402	2,402	0.05	0.38	0.15	2,516
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.20	2.75	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	602	602	0.01	0.02	1.07	610
Vendor	0.03	0.02	1.05	0.20	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,060	1,060	0.02	0.16	1.19	1,109
Hauling	0.04	0.02	1.61	0.26	0.01	0.03	0.39	0.42	0.03	0.11	0.14	—	1,433	1,433	0.03	0.23	1.48	1,503
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.50	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	99.7	99.7	< 0.005	< 0.005	0.18	101

Vendor	0.01	< 0.005	0.19	0.04	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	176	176	< 0.005	0.03	0.20	184
Hauling	0.01	< 0.005	0.29	0.05	< 0.005	0.01	0.07	0.08	0.01	0.02	0.02	—	237	237	< 0.005	0.04	0.24	249

3.16. Conveyance - Open Cut Trench (2026) - Mitigated

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 Equipm ent	2.17	1.88	14.5	37.4	0.06	0.50	—	0.50	0.46	—	0.46	—	6,309	6,309	0.26	0.05	—	6,331
Dust From Material Mover	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	2.17	1.88	14.5	37.4	0.06	0.50	—	0.50	0.46	—	0.46	—	6,309	6,309	0.26	0.05	—	6,331
Dust From Material Mover	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.29	1.12	8.67	22.4	0.04	0.30	—	0.30	0.28	—	0.28	—	3,766	3,766	0.15	0.03	—	3,779
Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.39	0.39	—	—	—	—	—	—	—
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	0.24	0.20	1.58	4.08	0.01	0.05	—	0.05	0.05	—	0.05	—	623	623	0.03	0.01	—	626
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.07	0.07	—	—	—	—	—	—	—
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	0.29	0.26	0.30	6.19	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	1,099	1,099	0.01	0.04	4.15	1,114
Vendor	0.06	0.03	1.67	0.35	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,776	1,776	0.03	0.27	4.62	1,861
Hauling	0.07	0.04	2.57	0.44	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,401	2,401	0.05	0.38	5.74	2,522
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.37	4.21	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	978	978	0.01	0.04	0.11	990
Vendor	0.06	0.03	1.79	0.34	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,776	1,776	0.03	0.27	0.12	1,856
Hauling	0.07	0.04	2.73	0.44	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,402	2,402	0.05	0.38	0.15	2,516
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.20	2.75	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	602	602	0.01	0.02	1.07	610

Vendor	0.03	0.02	1.05	0.20	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,060	1,060	0.02	0.16	1.19	1,109
Hauling	0.04	0.02	1.61	0.26	0.01	0.03	0.39	0.42	0.03	0.11	0.14	—	1,433	1,433	0.03	0.23	1.48	1,503
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.50	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	99.7	99.7	< 0.005	< 0.005	0.18	101
Vendor	0.01	< 0.005	0.19	0.04	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	176	176	< 0.005	0.03	0.20	184
Hauling	0.01	< 0.005	0.29	0.05	< 0.005	0.01	0.07	0.08	0.01	0.02	0.02	—	237	237	< 0.005	0.04	0.24	249

3.17. Conveyance - Open Cut Trench (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	4.46	3.73	33.0	34.9	0.06	1.41	—	1.41	1.30	—	1.30	—	6,310	6,310	0.26	0.05	—	6,331
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.46	3.73	33.0	34.9	0.06	1.41	—	1.41	1.30	—	1.30	—	6,310	6,310	0.26	0.05	—	6,331

Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.19	2.66	23.6	25.0	0.05	1.01	—	1.01	0.93	—	0.93	—	4,507	4,507	0.18	0.04	—	4,522
Dust From Material Movement	—	—	—	—	—	—	0.91	0.91	—	0.47	0.47	—	—	—	—	—	—	—
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	0.58	0.49	4.30	4.56	0.01	0.18	—	0.18	0.17	—	0.17	—	746	746	0.03	0.01	—	749
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.09	0.09	—	—	—	—	—	—	—
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	0.28	0.25	0.27	5.60	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	1,075	1,075	0.01	0.04	3.77	1,090
Vendor	0.06	0.03	1.59	0.32	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,738	1,738	0.03	0.25	4.09	1,818
Hauling	0.07	0.02	2.49	0.42	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,346	2,346	0.03	0.36	5.31	2,461

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.23	0.34	3.81	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	958	958	0.01	0.04	0.10	969
Vendor	0.06	0.03	1.70	0.32	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,738	1,738	0.03	0.25	0.11	1,814
Hauling	0.07	0.02	2.65	0.42	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,347	2,347	0.03	0.36	0.14	2,456
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.22	2.98	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	706	706	0.01	0.03	1.16	715
Vendor	0.04	0.02	1.18	0.23	0.01	0.02	0.36	0.38	0.02	0.10	0.12	—	1,242	1,242	0.02	0.18	1.26	1,297
Hauling	0.05	0.02	1.86	0.30	0.01	0.03	0.47	0.50	0.03	0.13	0.16	—	1,676	1,676	0.02	0.26	1.64	1,756
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.54	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	117	117	< 0.005	< 0.005	0.19	118
Vendor	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	206	206	< 0.005	0.03	0.21	215
Hauling	0.01	< 0.005	0.34	0.05	< 0.005	0.01	0.09	0.09	0.01	0.02	0.03	—	277	277	< 0.005	0.04	0.27	291

3.18. Conveyance - Open Cut Trench (2027) - Mitigated

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	2.17	1.88	14.5	37.4	0.06	0.49	—	0.49	0.46	—	0.46	—	6,310	6,310	0.26	0.05	—	6,331
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	1.88	14.5	37.4	0.06	0.49	—	0.49	0.46	—	0.46	—	6,310	6,310	0.26	0.05	—	6,331
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.55	1.34	10.4	26.7	0.05	0.35	—	0.35	0.33	—	0.33	—	4,507	4,507	0.18	0.04	—	4,522
Dust From Material Movement	—	—	—	—	—	—	0.91	0.91	—	0.47	0.47	—	—	—	—	—	—	—
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	0.28	0.24	1.89	4.88	0.01	0.06	—	0.06	0.06	—	0.06	—	746	746	0.03	0.01	—	749
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.09	0.09	—	—	—	—	—	—	—
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	0.28	0.25	0.27	5.60	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	1,075	1,075	0.01	0.04	3.77	1,090
Vendor	0.06	0.03	1.59	0.32	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,738	1,738	0.03	0.25	4.09	1,818
Hauling	0.07	0.02	2.49	0.42	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,346	2,346	0.03	0.36	5.31	2,461
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.23	0.34	3.81	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	958	958	0.01	0.04	0.10	969
Vendor	0.06	0.03	1.70	0.32	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,738	1,738	0.03	0.25	0.11	1,814
Hauling	0.07	0.02	2.65	0.42	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,347	2,347	0.03	0.36	0.14	2,456
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.16	0.22	2.98	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	706	706	0.01	0.03	1.16	715
Vendor	0.04	0.02	1.18	0.23	0.01	0.02	0.36	0.38	0.02	0.10	0.12	—	1,242	1,242	0.02	0.18	1.26	1,297
Hauling	0.05	0.02	1.86	0.30	0.01	0.03	0.47	0.50	0.03	0.13	0.16	—	1,676	1,676	0.02	0.26	1.64	1,756
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.54	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	117	117	< 0.005	< 0.005	0.19	118
Vendor	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	206	206	< 0.005	0.03	0.21	215
Hauling	0.01	< 0.005	0.34	0.05	< 0.005	0.01	0.09	0.09	0.01	0.02	0.03	—	277	277	< 0.005	0.04	0.27	291

3.19. Conveyance - Open Cut Trench (2028) - 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	4.39	3.67	32.3	35.0	0.06	1.35	—	1.35	1.24	—	1.24	—	6,309	6,309	0.26	0.05	—	6,330
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.39	3.67	32.3	35.0	0.06	1.35	—	1.35	1.24	—	1.24	—	6,309	6,309	0.26	0.05	—	6,330
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.75	15.4	16.7	0.03	0.64	—	0.64	0.59	—	0.59	—	3,012	3,012	0.12	0.02	—	3,023
Dust From Material Movement	—	—	—	—	—	—	0.61	0.61	—	0.31	0.31	—	—	—	—	—	—	—
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	0.38	0.32	2.81	3.05	0.01	0.12	—	0.12	0.11	—	0.11	—	499	499	0.02	< 0.005	—	500

Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.06	0.06	—	—	—	—	—	—	—
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	0.24	0.24	0.23	5.22	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	1,054	1,054	0.01	0.04	3.40	1,069
Vendor	0.05	0.03	1.51	0.29	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,695	1,695	0.03	0.25	3.61	1,775
Hauling	0.07	0.02	2.41	0.40	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,287	2,287	0.03	0.36	4.90	2,401
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.30	3.54	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	939	939	0.01	0.04	0.09	951
Vendor	0.04	0.03	1.61	0.30	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,695	1,695	0.03	0.25	0.09	1,771
Hauling	0.07	0.02	2.57	0.41	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,287	2,287	0.03	0.36	0.13	2,397
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.13	1.85	0.00	0.00	0.50	0.50	0.00	0.12	0.12	—	463	463	< 0.005	0.02	0.70	469
Vendor	0.02	0.01	0.75	0.14	0.01	0.01	0.24	0.25	0.01	0.07	0.08	—	809	809	0.01	0.12	0.75	846
Hauling	0.03	0.01	1.20	0.19	0.01	0.02	0.31	0.34	0.02	0.09	0.11	—	1,092	1,092	0.02	0.17	1.01	1,145
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.34	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	76.6	76.6	< 0.005	< 0.005	0.12	77.6
Vendor	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	134	134	< 0.005	0.02	0.12	140
Hauling	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	181	181	< 0.005	0.03	0.17	190

3.20. Conveyance - Open Cut Trench (2028) - Mitigated

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	2.17	1.87	14.5	37.4	0.06	0.49	—	0.49	0.46	—	0.46	—	6,309	6,309	0.26	0.05	—	6,330
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.17	1.87	14.5	37.4	0.06	0.49	—	0.49	0.46	—	0.46	—	6,309	6,309	0.26	0.05	—	6,330
Dust From Material Movement	—	—	—	—	—	—	1.28	1.28	—	0.66	0.66	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.90	6.93	17.9	0.03	0.24	—	0.24	0.22	—	0.22	—	3,012	3,012	0.12	0.02	—	3,023
Dust From Material Movement	—	—	—	—	—	—	0.61	0.61	—	0.31	0.31	—	—	—	—	—	—	—

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	0.19	0.16	1.26	3.26	0.01	0.04	—	0.04	0.04	—	0.04	—	499	499	0.02	< 0.005	—	500
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.06	0.06	—	—	—	—	—	—	—
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	0.24	0.24	0.23	5.22	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	1,054	1,054	0.01	0.04	3.40	1,069
Vendor	0.05	0.03	1.51	0.29	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,695	1,695	0.03	0.25	3.61	1,775
Hauling	0.07	0.02	2.41	0.40	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,287	2,287	0.03	0.36	4.90	2,401
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.30	3.54	0.00	0.00	1.06	1.06	0.00	0.25	0.25	—	939	939	0.01	0.04	0.09	951
Vendor	0.04	0.03	1.61	0.30	0.01	0.03	0.50	0.53	0.03	0.14	0.17	—	1,695	1,695	0.03	0.25	0.09	1,771
Hauling	0.07	0.02	2.57	0.41	0.02	0.05	0.66	0.71	0.05	0.18	0.23	—	2,287	2,287	0.03	0.36	0.13	2,397
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.13	1.85	0.00	0.00	0.50	0.50	0.00	0.12	0.12	—	463	463	< 0.005	0.02	0.70	469
Vendor	0.02	0.01	0.75	0.14	0.01	0.01	0.24	0.25	0.01	0.07	0.08	—	809	809	0.01	0.12	0.75	846
Hauling	0.03	0.01	1.20	0.19	0.01	0.02	0.31	0.34	0.02	0.09	0.11	—	1,092	1,092	0.02	0.17	1.01	1,145
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.34	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	76.6	76.6	< 0.005	< 0.005	0.12	77.6

Vendor	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	134	134	< 0.005	0.02	0.12	140
Hauling	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	181	181	< 0.005	0.03	0.17	190

3.21. Tunneling - Outlet and Conveyance (2026) - 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 Equipm ent	2.33	1.94	16.4	16.0	0.04	0.69	—	0.69	0.64	—	0.64	—	4,298	4,298	0.17	0.03	—	4,313
Dust From Material Movemer	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architect ural Coating s	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	2.33	1.94	16.4	16.0	0.04	0.69	—	0.69	0.64	—	0.64	—	4,298	4,298	0.17	0.03	—	4,313
Dust From Material Movemer	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Architect Coatings	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.50	6.35	0.02	0.28	—	0.28	0.25	—	0.25	—	1,708	1,708	0.07	0.01	—	1,713
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	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	0.17	0.14	1.19	1.16	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.24	0.23	0.14	2.61	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	421	421	0.01	0.02	1.57	428
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.17	2.00	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	376	376	0.01	0.02	0.04	381
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.82	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.27	156
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	0.02	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.5	25.5	< 0.005	< 0.005	0.04	25.9
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

3.22. Tunneling - Outlet and Conveyance (2026) - Mitigated

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 Equipm	1.36	1.18	8.23	23.0	0.04	0.32	—	0.32	0.30	—	0.30	—	4,298	4,298	0.17	0.03	—	4,313
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.36	1.18	8.23	23.0	0.04	0.32	—	0.32	0.30	—	0.30	—	4,298	4,298	0.17	0.03	—	4,313
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.47	3.27	9.13	0.02	0.13	—	0.13	0.12	—	0.12	—	1,708	1,708	0.07	0.01	—	1,713

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	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	0.10	0.09	0.60	1.67	< 0.005	0.02	—	0.02	0.02	—	0.02	—	283	283	0.01	< 0.005	—	284
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.24	0.23	0.14	2.61	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	421	421	0.01	0.02	1.57	428
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.17	2.00	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	376	376	0.01	0.02	0.04	381

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	0.82	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.27	156
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	0.02	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25.5	25.5	< 0.005	< 0.005	0.04	25.9
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

3.23. Dam Facilities - Spillway (2028) - 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	0.71	0.59	5.20	5.73	0.01	0.14	—	0.14	0.13	—	0.13	—	862	862	0.03	0.01	—	865
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.71	0.59	5.20	5.73	0.01	0.14	—	0.14	0.13	—	0.13	—	862	862	0.03	0.01	—	865
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	2.63	2.90	< 0.005	0.07	—	0.07	0.07	—	0.07	—	437	437	0.02	< 0.005	—	439
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	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	0.07	0.05	0.48	0.53	< 0.005	0.01	—	0.01	0.01	—	0.01	—	72.4	72.4	< 0.005	< 0.005	—	72.6
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	0.03	0.03	0.02	0.32	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.7	57.7	< 0.005	< 0.005	0.18	58.6
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	0.92	0.39	25.2	6.25	0.15	0.43	5.97	6.40	0.43	1.63	2.06	—	21,044	21,044	0.36	3.35	44.3	22,096
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	51.5	51.5	< 0.005	< 0.005	< 0.005	52.3
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	0.87	0.36	27.0	6.37	0.15	0.43	5.97	6.40	0.43	1.63	2.06	—	21,058	21,058	0.36	3.35	1.15	22,067
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.9	26.9	< 0.005	< 0.005	0.04	27.3
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	0.45	0.19	13.4	3.19	0.08	0.22	3.02	3.23	0.22	0.83	1.04	—	10,669	10,669	0.18	1.70	9.68	11,190
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.46	4.46	< 0.005	< 0.005	0.01	4.52
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	0.08	0.03	2.44	0.58	0.01	0.04	0.55	0.59	0.04	0.15	0.19	—	1,766	1,766	0.03	0.28	1.60	1,853

3.24. Dam Facilities - Spillway (2028) - Mitigated

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 Equipm ent	0.11	0.11	3.32	4.95	0.01	0.01	—	0.01	0.01	—	0.01	—	862	862	0.03	0.01	—	865
Dust From Material Movemer	—	—	—	—	—	—	0.07	0.07	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.11	0.11	3.32	4.95	0.01	0.01	—	0.01	0.01	—	0.01	—	862	862	0.03	0.01	—	865
Dust From Material Movemer	—	—	—	—	—	—	0.07	0.07	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.06	0.06	1.68	2.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	437	437	0.02	< 0.005	—	439
Dust From Material Movemer	—	—	—	—	—	—	0.04	0.04	—	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 Equipm ent	0.01	0.01	0.31	0.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	72.4	72.4	< 0.005	< 0.005	—	72.6
Dust From Material Movemer	—	—	—	—	—	—	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	0.03	0.03	0.02	0.32	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.7	57.7	< 0.005	< 0.005	0.18	58.6
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	0.92	0.39	25.2	6.25	0.15	0.43	5.97	6.40	0.43	1.63	2.06	—	21,044	21,044	0.36	3.35	44.3	22,096
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	51.5	51.5	< 0.005	< 0.005	< 0.005	52.3
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	0.87	0.36	27.0	6.37	0.15	0.43	5.97	6.40	0.43	1.63	2.06	—	21,058	21,058	0.36	3.35	1.15	22,067
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.9	26.9	< 0.005	< 0.005	0.04	27.3
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	0.45	0.19	13.4	3.19	0.08	0.22	3.02	3.23	0.22	0.83	1.04	—	10,669	10,669	0.18	1.70	9.68	11,190
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.46	4.46	< 0.005	< 0.005	0.01	4.52
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	0.08	0.03	2.44	0.58	0.01	0.04	0.55	0.59	0.04	0.15	0.19	—	1,766	1,766	0.03	0.28	1.60	1,853

3.25. Dam Facilities - Spillway (2029) - 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	0.70	0.58	5.16	5.73	0.01	0.13	—	0.13	0.12	—	0.12	—	863	863	0.03	0.01	—	866
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.58	5.16	5.73	0.01	0.13	—	0.13	0.12	—	0.12	—	863	863	0.03	0.01	—	866
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	1.99	2.21	< 0.005	0.05	—	0.05	0.05	—	0.05	—	333	333	0.01	< 0.005	—	334
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	0.05	0.04	0.36	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	55.1	55.1	< 0.005	< 0.005	—	55.3

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	0.03	0.03	0.02	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	56.6	56.6	< 0.005	< 0.005	0.16	57.5
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	0.91	0.39	24.6	6.11	0.15	0.43	5.97	6.40	0.43	1.63	2.06	—	20,497	20,497	0.36	3.21	40.6	21,503
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	50.6	50.6	< 0.005	< 0.005	< 0.005	51.3
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	0.87	0.36	26.2	6.23	0.15	0.43	5.97	6.40	0.43	1.63	2.06	—	20,511	20,511	0.36	3.21	1.05	21,477
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.1	20.1	< 0.005	< 0.005	0.03	20.4
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	0.34	0.15	9.87	2.38	0.06	0.16	2.29	2.46	0.16	0.63	0.79	—	7,904	7,904	0.14	1.24	6.76	8,283
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.33	3.33	< 0.005	< 0.005	< 0.005	3.38
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	0.06	0.03	1.80	0.43	0.01	0.03	0.42	0.45	0.03	0.11	0.14	—	1,309	1,309	0.02	0.20	1.12	1,371

3.26. Dam Facilities - Spillway (2029) - Mitigated

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	0.11	0.11	3.32	4.95	0.01	0.01	—	0.01	0.01	—	0.01	—	863	863	0.03	0.01	—	866
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	3.32	4.95	0.01	0.01	—	0.01	0.01	—	0.01	—	863	863	0.03	0.01	—	866
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.28	1.91	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	333	333	0.01	< 0.005	—	334
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 Equipm ent	0.01	0.01	0.23	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	55.1	55.1	< 0.005	< 0.005	—	55.3
Dust From Material Movemer	—	—	—	—	—	—	< 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	0.03	0.03	0.02	0.29	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	56.6	56.6	< 0.005	< 0.005	0.16	57.5
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	0.91	0.39	24.6	6.11	0.15	0.43	5.97	6.40	0.43	1.63	2.06	—	20,497	20,497	0.36	3.21	40.6	21,503
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	50.6	50.6	< 0.005	< 0.005	< 0.005	51.3
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	0.87	0.36	26.2	6.23	0.15	0.43	5.97	6.40	0.43	1.63	2.06	—	20,511	20,511	0.36	3.21	1.05	21,477
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.1	20.1	< 0.005	< 0.005	0.03	20.4
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	0.34	0.15	9.87	2.38	0.06	0.16	2.29	2.46	0.16	0.63	0.79	—	7,904	7,904	0.14	1.24	6.76	8,283
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.33	3.33	< 0.005	< 0.005	< 0.005	3.38

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	0.06	0.03	1.80	0.43	0.01	0.03	0.42	0.45	0.03	0.11	0.14	—	1,309	1,309	0.02	0.20	1.12	1,371

3.27. Dam Facilities - Site Restoration (2029) - 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	2.81	2.35	17.8	26.2	0.04	0.81	—	0.81	0.75	—	0.75	—	4,266	4,266	0.17	0.03	—	4,281
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.81	2.35	17.8	26.2	0.04	0.81	—	0.81	0.75	—	0.75	—	4,266	4,266	0.17	0.03	—	4,281
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.10	0.92	6.95	10.2	0.02	0.32	—	0.32	0.29	—	0.29	—	1,670	1,670	0.07	0.01	—	1,675
Dust From Material Movement	—	—	—	—	—	—	0.40	0.40	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.17	1.27	1.87	< 0.005	0.06	—	0.06	0.05	—	0.05	—	276	276	0.01	< 0.005	—	277
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.04	0.78	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	151	151	< 0.005	0.01	0.44	153
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.60	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	135	135	< 0.005	0.01	0.01	137
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.4	54.4	< 0.005	< 0.005	0.07	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	0.00	0.00	0.00	0.00	0.00	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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.00	9.00	< 0.005	< 0.005	0.01	9.14
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

3.28. Dam Facilities - Site Restoration (2029) - Mitigated

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	0.44	0.42	2.38	25.4	0.04	0.09	—	0.09	0.09	—	0.09	—	4,266	4,266	0.17	0.03	—	4,281
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.42	2.38	25.4	0.04	0.09	—	0.09	0.09	—	0.09	—	4,266	4,266	0.17	0.03	—	4,281

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.16	0.93	9.94	0.02	0.04	—	0.04	0.04	—	0.04	—	1,670	1,670	0.07	0.01	—	1,675
Dust From Material Movement	—	—	—	—	—	—	0.40	0.40	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.17	1.81	< 0.005	0.01	—	0.01	0.01	—	0.01	—	276	276	0.01	< 0.005	—	277
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.04	0.78	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	151	151	< 0.005	0.01	0.44	153
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.60	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	135	135	< 0.005	0.01	0.01	137
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.4	54.4	< 0.005	< 0.005	0.07	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	0.00	0.00	0.00	0.00	0.00	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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.00	9.00	< 0.005	< 0.005	0.01	9.14
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

3.29. Dam Facilities - Site Restoration (2030) - 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	2.74	2.29	17.0	26.1	0.04	0.78	—	0.78	0.72	—	0.72	—	4,267	4,267	0.17	0.03	—	4,281
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.74	2.29	17.0	26.1	0.04	0.78	—	0.78	0.72	—	0.72	—	4,267	4,267	0.17	0.03	—	4,281
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.03	9.26	0.01	0.28	—	0.28	0.25	—	0.25	—	1,511	1,511	0.06	0.01	—	1,517
Dust From Material Movement	—	—	—	—	—	—	0.37	0.37	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.10	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	250	250	0.01	< 0.005	—	251
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.73	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.39	149
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.56	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	132	132	< 0.005	0.01	0.01	134
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.2	48.2	< 0.005	< 0.005	0.06	49.0
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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.99	7.99	< 0.005	< 0.005	0.01	8.11
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

3.30. Dam Facilities - Site Restoration (2030) - Mitigated

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	0.44	0.42	2.38	25.4	0.04	0.09	—	0.09	0.09	—	0.09	—	4,267	4,267	0.17	0.03	—	4,281
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.42	2.38	25.4	0.04	0.09	—	0.09	0.09	—	0.09	—	4,267	4,267	0.17	0.03	—	4,281
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	0.84	9.00	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,517
Dust From Material Movement	—	—	—	—	—	—	0.37	0.37	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.15	1.64	< 0.005	0.01	—	0.01	0.01	—	0.01	—	250	250	0.01	< 0.005	—	251

Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.73	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.39	149
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.56	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	132	132	< 0.005	0.01	0.01	134
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.2	48.2	< 0.005	< 0.005	0.06	49.0
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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.99	7.99	< 0.005	< 0.005	0.01	8.11
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

3.31. Pumping Plant (2026) - 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	6.77	5.68	43.6	46.3	0.12	1.79	—	1.79	1.65	—	1.65	—	12,374	12,374	0.50	0.10	—	12,416
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.77	5.68	43.6	46.3	0.12	1.79	—	1.79	1.65	—	1.65	—	12,374	12,374	0.50	0.10	—	12,416
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.44	2.05	15.7	16.7	0.04	0.64	—	0.64	0.59	—	0.59	—	4,456	4,456	0.18	0.04	—	4,471
Dust From Material Movement	—	—	—	—	—	—	1.49	1.49	—	0.72	0.72	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	2.86	3.04	0.01	0.12	—	0.12	0.11	—	0.11	—	738	738	0.03	0.01	—	740
Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.13	0.13	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.36	0.33	0.20	3.86	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	621	621	0.01	0.03	2.31	631
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	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.2	71.2	< 0.005	0.01	0.17	74.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.33	0.30	0.25	2.95	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	555	555	0.02	0.03	0.06	563
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	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.3	71.3	< 0.005	0.01	< 0.005	74.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.08	1.10	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	206	206	0.01	0.01	0.36	209
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	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.7	25.7	< 0.005	< 0.005	0.03	26.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34.1	34.1	< 0.005	< 0.005	0.06	34.6
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	—	4.25	4.25	< 0.005	< 0.005	< 0.005	4.45

3.32. Pumping Plant (2026) - Mitigated

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	1.61	1.54	11.4	65.5	0.12	0.33	—	0.33	0.32	—	0.32	—	12,374	12,374	0.50	0.10	—	12,416
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.61	1.54	11.4	65.5	0.12	0.33	—	0.33	0.32	—	0.32	—	12,374	12,374	0.50	0.10	—	12,416
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.55	4.09	23.6	0.04	0.12	—	0.12	0.12	—	0.12	—	4,456	4,456	0.18	0.04	—	4,471
Dust From Material Movement	—	—	—	—	—	—	1.49	1.49	—	0.72	0.72	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.11	0.10	0.75	4.31	0.01	0.02	—	0.02	0.02	—	0.02	—	738	738	0.03	0.01	—	740
Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.13	0.13	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.36	0.33	0.20	3.86	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	621	621	0.01	0.03	2.31	631
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	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.2	71.2	< 0.005	0.01	0.17	74.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.30	0.25	2.95	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	555	555	0.02	0.03	0.06	563
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	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.3	71.3	< 0.005	0.01	< 0.005	74.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.08	1.10	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	206	206	0.01	0.01	0.36	209
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	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.7	25.7	< 0.005	< 0.005	0.03	26.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34.1	34.1	< 0.005	< 0.005	0.06	34.6
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	—	4.25	4.25	< 0.005	< 0.005	< 0.005	4.45

3.33. Pumping Plant (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	6.66	5.59	41.7	46.1	0.12	1.69	—	1.69	1.56	—	1.56	—	12,373	12,373	0.50	0.10	—	12,416
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.66	5.59	41.7	46.1	0.12	1.69	—	1.69	1.56	—	1.56	—	12,373	12,373	0.50	0.10	—	12,416
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—

Architectural Coating	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.75	3.99	29.8	32.9	0.08	1.21	—	1.21	1.11	—	1.11	—	8,838	8,838	0.36	0.07	—	8,868
Dust From Material Movement	—	—	—	—	—	—	2.96	2.96	—	1.43	1.43	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	5.44	6.01	0.02	0.22	—	0.22	0.20	—	0.20	—	1,463	1,463	0.06	0.01	—	1,468
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.26	0.26	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.32	0.18	3.50	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	608	608	0.01	0.02	2.10	618
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	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.6	69.6	< 0.005	0.01	0.15	73.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.28	0.23	2.69	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	543	543	0.02	0.03	0.05	551
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	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.6	69.6	< 0.005	0.01	< 0.005	72.9
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.21	0.15	1.99	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	400	400	0.01	0.02	0.65	406
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	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.7	49.7	< 0.005	0.01	0.05	52.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	66.2	66.2	< 0.005	< 0.005	0.11	67.2
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	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.23	8.23	< 0.005	< 0.005	0.01	8.62

3.34. Pumping Plant (2027) - Mitigated

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 Equipm	1.61	1.54	11.4	65.5	0.12	0.33	—	0.33	0.32	—	0.32	—	12,373	12,373	0.50	0.10	—	12,416
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.61	1.54	11.4	65.5	0.12	0.33	—	0.33	0.32	—	0.32	—	12,373	12,373	0.50	0.10	—	12,416
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	1.10	8.12	46.8	0.08	0.24	—	0.24	0.23	—	0.23	—	8,838	8,838	0.36	0.07	—	8,868

Dust From Material Movement	—	—	—	—	—	—	2.96	2.96	—	1.43	1.43	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.20	1.48	8.54	0.02	0.04	—	0.04	0.04	—	0.04	—	1,463	1,463	0.06	0.01	—	1,468
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.26	0.26	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.32	0.18	3.50	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	608	608	0.01	0.02	2.10	618
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	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.6	69.6	< 0.005	0.01	0.15	73.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.28	0.23	2.69	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	543	543	0.02	0.03	0.05	551

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	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	69.6	69.6	< 0.005	0.01	< 0.005	72.9
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.21	0.15	1.99	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	400	400	0.01	0.02	0.65	406
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	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.7	49.7	< 0.005	0.01	0.05	52.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	66.2	66.2	< 0.005	< 0.005	0.11	67.2
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	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.23	8.23	< 0.005	< 0.005	0.01	8.62

3.35. Pumping Plant (2028) - 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	6.53	5.48	39.8	46.0	0.12	1.59	—	1.59	1.46	—	1.46	—	12,379	12,379	0.50	0.10	—	12,421
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.53	5.48	39.8	46.0	0.12	1.59	—	1.59	1.46	—	1.46	—	12,379	12,379	0.50	0.10	—	12,421
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.68	3.93	28.5	33.0	0.08	1.14	—	1.14	1.05	—	1.05	—	8,866	8,866	0.36	0.07	—	8,897
Dust From Material Movement	—	—	—	—	—	—	2.97	2.97	—	1.44	1.44	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.72	5.20	6.02	0.02	0.21	—	0.21	0.19	—	0.19	—	1,468	1,468	0.06	0.01	—	1,473

Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.26	0.26	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.30	0.16	3.26	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	596	596	0.01	0.02	1.90	605
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	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	67.8	67.8	< 0.005	0.01	0.14	71.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.26	0.21	2.50	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	532	532	0.02	0.03	0.05	540
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	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	67.9	67.9	< 0.005	0.01	< 0.005	71.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.13	1.86	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	393	393	0.01	0.02	0.59	399
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	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.6	48.6	< 0.005	0.01	0.04	51.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.34	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	65.1	65.1	< 0.005	< 0.005	0.10	66.0
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	—	8.05	8.05	< 0.005	< 0.005	0.01	8.44

3.36. Pumping Plant (2028) - Mitigated

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	1.62	1.54	11.4	65.5	0.12	0.33	—	0.33	0.32	—	0.32	—	12,379	12,379	0.50	0.10	—	12,421
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.62	1.54	11.4	65.5	0.12	0.33	—	0.33	0.32	—	0.32	—	12,379	12,379	0.50	0.10	—	12,421
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16	1.10	8.15	46.9	0.08	0.24	—	0.24	0.23	—	0.23	—	8,866	8,866	0.36	0.07	—	8,897
Dust From Material Movement	—	—	—	—	—	—	2.97	2.97	—	1.44	1.44	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.20	1.49	8.57	0.02	0.04	—	0.04	0.04	—	0.04	—	1,468	1,468	0.06	0.01	—	1,473
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.26	0.26	—	—	—	—	—	—	—
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.31	0.30	0.16	3.26	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	596	596	0.01	0.02	1.90	605
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	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	67.8	67.8	< 0.005	0.01	0.14	71.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.26	0.21	2.50	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	532	532	0.02	0.03	0.05	540
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	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	67.9	67.9	< 0.005	0.01	< 0.005	71.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.13	1.86	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	393	393	0.01	0.02	0.59	399
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	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.6	48.6	< 0.005	0.01	0.04	51.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.34	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	65.1	65.1	< 0.005	< 0.005	0.10	66.0
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	—	8.05	8.05	< 0.005	< 0.005	0.01	8.44

3.37. Pumping Plant (2029) - 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	6.39	5.36	37.5	45.7	0.12	1.50	—	1.50	1.38	—	1.38	—	12,378	12,378	0.50	0.10	—	12,420

Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.39	5.36	37.5	45.7	0.12	1.50	—	1.50	1.38	—	1.38	—	12,378	12,378	0.50	0.10	—	12,420
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.26	1.90	13.3	16.2	0.04	0.53	—	0.53	0.49	—	0.49	—	4,384	4,384	0.18	0.04	—	4,399
Dust From Material Movement	—	—	—	—	—	—	1.47	1.47	—	0.71	0.71	—	—	—	—	—	—	—

Architectural	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.35	2.42	2.95	0.01	0.10	—	0.10	0.09	—	0.09	—	726	726	0.03	0.01	—	728
Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.13	0.13	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.29	0.27	0.16	3.04	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	585	585	0.01	0.02	1.70	594
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	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.1	66.1	< 0.005	0.01	0.13	69.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.19	2.33	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	523	523	0.02	0.03	0.04	531
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	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.1	66.1	< 0.005	0.01	< 0.005	69.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	0.86	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	191	191	< 0.005	0.01	0.26	194

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	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.4	23.4	< 0.005	< 0.005	0.02	24.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	0.04	32.0
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	—	3.88	3.88	< 0.005	< 0.005	< 0.005	4.06

3.38. Pumping Plant (2029) - Mitigated

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	1.61	1.54	11.4	65.5	0.12	0.33	—	0.33	0.32	—	0.32	—	12,378	12,378	0.50	0.10	—	12,420
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.61	1.54	11.4	65.5	0.12	0.33	—	0.33	0.32	—	0.32	—	12,378	12,378	0.50	0.10	—	12,420
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	0.54	4.03	23.2	0.04	0.12	—	0.12	0.11	—	0.11	—	4,384	4,384	0.18	0.04	—	4,399
Dust From Material Movement	—	—	—	—	—	—	1.47	1.47	—	0.71	0.71	—	—	—	—	—	—	—
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	0.74	4.24	0.01	0.02	—	0.02	0.02	—	0.02	—	726	726	0.03	0.01	—	728

Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.13	0.13	—	—	—	—	—	—	—
Architectural Coatings	< 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	0.29	0.27	0.16	3.04	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	585	585	0.01	0.02	1.70	594
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	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.1	66.1	< 0.005	0.01	0.13	69.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.19	2.33	0.00	0.00	0.59	0.59	0.00	0.14	0.14	—	523	523	0.02	0.03	0.04	531
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	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.1	66.1	< 0.005	0.01	< 0.005	69.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	0.86	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	191	191	< 0.005	0.01	0.26	194
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	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.4	23.4	< 0.005	< 0.005	0.02	24.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	0.04	32.0
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	—	3.88	3.88	< 0.005	< 0.005	< 0.005	4.06

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.47	0.44	0.42	3.89	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	963	963	0.03	0.04	2.76	979
Total	0.47	0.44	0.42	3.89	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	963	963	0.03	0.04	2.76	979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.43	0.40	0.48	3.25	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	887	887	0.04	0.05	0.07	902
Total	0.43	0.40	0.48	3.25	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	887	887	0.04	0.05	0.07	902
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.08	0.07	0.08	0.60	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	—	150	150	0.01	0.01	0.20	153
Total	0.08	0.07	0.08	0.60	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	—	150	150	0.01	0.01	0.20	153

4.1.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.47	0.44	0.42	3.89	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	963	963	0.03	0.04	2.76	979
Total	0.47	0.44	0.42	3.89	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	963	963	0.03	0.04	2.76	979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.43	0.40	0.48	3.25	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	887	887	0.04	0.05	0.07	902
Total	0.43	0.40	0.48	3.25	0.01	0.01	0.86	0.87	0.01	0.22	0.23	—	887	887	0.04	0.05	0.07	902
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.08	0.07	0.08	0.60	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	—	150	150	0.01	0.01	0.20	153
Total	0.08	0.07	0.08	0.60	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	—	150	150	0.01	0.01	0.20	153

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	18,616	18,616	3.01	0.37	—	18,800
Total	—	—	—	—	—	—	—	—	—	—	—	—	18,616	18,616	3.01	0.37	—	18,800
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	18,616	18,616	3.01	0.37	—	18,800
Total	—	—	—	—	—	—	—	—	—	—	—	—	18,616	18,616	3.01	0.37	—	18,800
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,082	3,082	0.50	0.06	—	3,113
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,082	3,082	0.50	0.06	—	3,113

4.2.2. Electricity Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated	—	—	—	—	—	—	—	—	—	—	—	—	18,616	18,616	3.01	0.37	—	18,800
Total	—	—	—	—	—	—	—	—	—	—	—	—	18,616	18,616	3.01	0.37	—	18,800
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	18,616	18,616	3.01	0.37	—	18,800
Total	—	—	—	—	—	—	—	—	—	—	—	—	18,616	18,616	3.01	0.37	—	18,800
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,082	3,082	0.50	0.06	—	3,113
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,082	3,082	0.50	0.06	—	3,113

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refriger Warehouse-No Rail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	74.2	74.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	74.2	74.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consum er Product s	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coating s	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	407	407	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumers Products	74.2	74.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	74.2	74.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Refrigerated Warehouse-Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.4.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Refrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.6.2. Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

Equipm ent Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equip ment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

Equip ment Type	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. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	2,785	2,785	—	—	—	2,785
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,785	2,785	—	—	—	2,785
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	2,785	2,785	—	—	—	2,785
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,785	2,785	—	—	—	2,785
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	461	461	—	—	—	461
Total	—	—	—	—	—	—	—	—	—	—	—	—	461	461	—	—	—	461

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	1,156	1,156	—	—	—	1,156

Total	—	—	—	—	—	—	—	—	—	—	—	—	1,156	1,156	—	—	—	1,156
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	1,156	1,156	—	—	—	1,156
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,156	1,156	—	—	—	1,156
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	191	191	—	—	—	191
Total	—	—	—	—	—	—	—	—	—	—	—	—	191	191	—	—	—	191

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetati on	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	2,785	2,785	—	—	—	2,785
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,785	2,785	—	—	—	2,785
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	2,785	2,785	—	—	—	2,785
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,785	2,785	—	—	—	2,785

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	461	461	—	—	—	461
Total	—	—	—	—	—	—	—	—	—	—	—	—	461	461	—	—	—	461

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	1,156	1,156	—	—	—	1,156
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,156	1,156	—	—	—	1,156
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	1,156	1,156	—	—	—	1,156
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,156	1,156	—	—	—	1,156
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	191	191	—	—	—	191
Total	—	—	—	—	—	—	—	—	—	—	—	—	191	191	—	—	—	191

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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
Dam Facilities - Site Preparation	Site Preparation	3/2/2026	4/30/2026	5.00	44.0	Dam Facilities - Site Preparation
Dam Facilities - Main Dam	Site Preparation	3/2/2026	9/29/2029	5.00	935	Dam Facilities - Main Dam
Dam Facilities - Outlet Works	Site Preparation	5/20/2027	4/25/2028	5.00	244	Dam Facilities - Outlet Works
Conveyance - Open Cut Trench	Site Preparation	3/2/2026	8/31/2028	5.00	654	Conveyance - Open Cut Trench
Tunneling - Outlet and Conveyance	Site Preparation	3/2/2026	9/18/2026	5.00	145	Tunneling - Outlet and Conveyance
Dam Facilities - Spillway	Grading	4/17/2028	7/16/2029	5.00	326	Dam Facilities - Spillway
Dam Facilities - Site Restoration	Grading	6/15/2029	6/30/2030	5.00	271	Dam Facilities - Site Restoration
Pumping Plant	Grading	7/1/2026	6/30/2029	5.00	783	Pumping Plant

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
Dam Facilities - Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	20.0	16.0	0.38
Dam Facilities - Site Preparation	Graders	Diesel	Average	1.00	20.0	148	0.41
Dam Facilities - Site Preparation	Off-Highway Trucks	Diesel	Average	3.00	20.0	376	0.38
Dam Facilities - Site Preparation	Other Construction Equipment	Diesel	Average	1.00	20.0	82.0	0.42

Dam Facilities - Site Preparation	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	20.0	367	0.40
Dam Facilities - Site Preparation	Scrapers	Diesel	Average	1.00	20.0	423	0.48
Dam Facilities - Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	2.00	20.0	84.0	0.37
Dam Facilities - Main Dam	Dumpers/Tenders	Diesel	Average	4.00	20.0	16.0	0.38
Dam Facilities - Main Dam	Excavators	Diesel	Average	1.00	20.0	36.0	0.38
Dam Facilities - Main Dam	Off-Highway Trucks	Diesel	Average	9.00	20.0	376	0.38
Dam Facilities - Main Dam	Other Construction Equipment	Diesel	Average	3.00	20.0	82.0	0.42
Dam Facilities - Main Dam	Plate Compactors	Diesel	Average	6.00	20.0	8.00	0.43
Dam Facilities - Main Dam	Rubber Tired Dozers	Diesel	Average	6.00	20.0	367	0.40
Dam Facilities - Main Dam	Scrapers	Diesel	Average	6.00	20.0	423	0.48
Dam Facilities - Main Dam	Tractors/Loaders/Back hoes	Diesel	Average	2.00	20.0	84.0	0.37
Dam Facilities - Outlet Works	Dumpers/Tenders	Diesel	Average	2.00	20.0	16.0	0.38
Conveyance - Open Cut Trench	Excavators	Diesel	Average	2.00	10.0	36.0	0.38
Conveyance - Open Cut Trench	Rubber Tired Dozers	Diesel	Average	1.00	4.00	367	0.40
Conveyance - Open Cut Trench	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Conveyance - Open Cut Trench	Dumpers/Tenders	Diesel	Average	15.0	10.0	16.0	0.38

Conveyance - Open Cut Trench	Tractors/Loaders/Back hoes	Diesel	Average	2.00	10.0	84.0	0.37
Conveyance - Open Cut Trench	Other Construction Equipment	Diesel	Average	12.0	5.00	82.0	0.42
Conveyance - Open Cut Trench	Cranes	Diesel	Average	1.00	6.00	367	0.29
Tunneling - Outlet and Conveyance	Bore/Drill Rigs	Diesel	Average	1.00	10.0	367	0.40
Tunneling - Outlet and Conveyance	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Tunneling - Outlet and Conveyance	Dumpers/Tenders	Diesel	Average	8.00	10.0	16.0	0.38
Tunneling - Outlet and Conveyance	Other Construction Equipment	Diesel	Average	9.00	2.00	82.0	0.42
Tunneling - Outlet and Conveyance	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Tunneling - Outlet and Conveyance	Cranes	Diesel	Average	1.00	6.00	367	0.29
Dam Facilities - Spillway	Dumpers/Tenders	Diesel	Average	1.00	20.0	16.0	0.38
Dam Facilities - Spillway	Excavators	Diesel	Average	2.00	20.0	36.0	0.38
Dam Facilities - Site Restoration	Dumpers/Tenders	Diesel	Average	4.00	20.0	16.0	0.38
Dam Facilities - Site Restoration	Graders	Diesel	Average	2.00	20.0	148	0.41
Dam Facilities - Site Restoration	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Restoration	Tractors/Loaders/Back hoes	Diesel	Average	1.00	20.0	84.0	0.37
Pumping Plant	Excavators	Diesel	Average	2.00	6.00	36.0	0.38
Pumping Plant	Rubber Tired Dozers	Diesel	Average	2.00	6.00	367	0.40
Pumping Plant	Off-Highway Trucks	Diesel	Average	6.00	6.00	376	0.38
Pumping Plant	Dumpers/Tenders	Diesel	Average	8.00	6.00	16.0	0.38

Pumping Plant	Tractors/Loaders/Back	Diesel	Average	4.00	5.00	84.0	0.37
Pumping Plant	Rollers	Diesel	Average	4.00	6.00	36.0	0.38
Pumping Plant	Graders	Diesel	Average	2.00	6.00	148	0.41
Pumping Plant	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Pumping Plant	Cranes	Diesel	Average	2.00	6.00	367	0.29

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Dam Facilities - Site Preparation	Dumpers/Tenders	Diesel	Average	1.00	20.0	16.0	0.38
Dam Facilities - Site Preparation	Graders	Diesel	Tier 4 Final	1.00	20.0	148	0.41
Dam Facilities - Site Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	20.0	376	0.38
Dam Facilities - Site Preparation	Other Construction Equipment	Diesel	Tier 4 Final	1.00	20.0	82.0	0.42
Dam Facilities - Site Preparation	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	20.0	367	0.40
Dam Facilities - Site Preparation	Scrapers	Diesel	Tier 4 Final	1.00	20.0	423	0.48
Dam Facilities - Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	20.0	84.0	0.37
Dam Facilities - Main Dam	Dumpers/Tenders	Diesel	Average	4.00	20.0	16.0	0.38
Dam Facilities - Main Dam	Excavators	Diesel	Tier 4 Final	1.00	20.0	36.0	0.38
Dam Facilities - Main Dam	Off-Highway Trucks	Diesel	Tier 4 Final	9.00	20.0	376	0.38
Dam Facilities - Main Dam	Other Construction Equipment	Diesel	Tier 4 Final	3.00	20.0	82.0	0.42

Dam Facilities - Main Dam	Plate Compactors	Diesel	Average	6.00	20.0	8.00	0.43
Dam Facilities - Main Dam	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	20.0	367	0.40
Dam Facilities - Main Dam	Scrapers	Diesel	Tier 4 Final	6.00	20.0	423	0.48
Dam Facilities - Main Dam	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	20.0	84.0	0.37
Dam Facilities - Outlet Works	Dumpers/Tenders	Diesel	Average	2.00	20.0	16.0	0.38
Conveyance - Open Cut Trench	Excavators	Diesel	Tier 4 Final	2.00	10.0	36.0	0.38
Conveyance - Open Cut Trench	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	4.00	367	0.40
Conveyance - Open Cut Trench	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Conveyance - Open Cut Trench	Dumpers/Tenders	Diesel	Average	15.0	10.0	16.0	0.38
Conveyance - Open Cut Trench	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	2.00	10.0	84.0	0.37
Conveyance - Open Cut Trench	Other Construction Equipment	Diesel	Tier 4 Final	12.0	5.00	82.0	0.42
Conveyance - Open Cut Trench	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Tunneling - Outlet and Conveyance	Bore/Drill Rigs	Diesel	Tier 4 Final	1.00	10.0	367	0.40
Tunneling - Outlet and Conveyance	Pumps	Diesel	Average	1.00	24.0	11.0	0.74
Tunneling - Outlet and Conveyance	Dumpers/Tenders	Diesel	Average	8.00	10.0	16.0	0.38
Tunneling - Outlet and Conveyance	Other Construction Equipment	Diesel	Tier 4 Final	9.00	2.00	82.0	0.42
Tunneling - Outlet and Conveyance	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37

Tunneling - Outlet and Conveyance	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Dam Facilities - Spillway	Dumpers/Tenders	Diesel	Tier 4 Final	1.00	20.0	16.0	0.38
Dam Facilities - Spillway	Excavators	Diesel	Tier 4 Final	2.00	20.0	36.0	0.38
Dam Facilities - Site Restoration	Dumpers/Tenders	Diesel	Tier 4 Final	4.00	20.0	16.0	0.38
Dam Facilities - Site Restoration	Graders	Diesel	Tier 4 Final	2.00	20.0	148	0.41
Dam Facilities - Site Restoration	Plate Compactors	Diesel	Average	1.00	20.0	8.00	0.43
Dam Facilities - Site Restoration	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	1.00	20.0	84.0	0.37
Pumping Plant	Excavators	Diesel	Tier 4 Final	2.00	6.00	36.0	0.38
Pumping Plant	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	6.00	367	0.40
Pumping Plant	Off-Highway Trucks	Diesel	Tier 4 Final	6.00	6.00	376	0.38
Pumping Plant	Dumpers/Tenders	Diesel	Average	8.00	6.00	16.0	0.38
Pumping Plant	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	5.00	84.0	0.37
Pumping Plant	Rollers	Diesel	Tier 4 Final	4.00	6.00	36.0	0.38
Pumping Plant	Graders	Diesel	Tier 4 Final	2.00	6.00	148	0.41
Pumping Plant	Pavers	Diesel	Tier 4 Final	1.00	6.00	81.0	0.42
Pumping Plant	Cranes	Diesel	Tier 4 Final	2.00	6.00	367	0.29

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Dam Facilities - Site Preparation	—	—	—	—
Dam Facilities - Site Preparation	Worker	12.0	30.0	LDA,LDT1,LDT2

Dam Facilities - Site Preparation	Vendor	2.00	75.0	HHDT,MHDT
Dam Facilities - Site Preparation	Hauling	0.00	20.0	HHDT
Dam Facilities - Site Preparation	Onsite truck	—	—	HHDT
Dam Facilities - Main Dam	—	—	—	—
Dam Facilities - Main Dam	Worker	12.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Main Dam	Vendor	42.0	75.0	HHDT,MHDT
Dam Facilities - Main Dam	Hauling	0.00	20.0	HHDT
Dam Facilities - Main Dam	Onsite truck	—	—	HHDT
Dam Facilities - Outlet Works	—	—	—	—
Dam Facilities - Outlet Works	Worker	2.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Outlet Works	Vendor	11.0	75.0	HHDT,MHDT
Dam Facilities - Outlet Works	Hauling	0.00	20.0	HHDT
Dam Facilities - Outlet Works	Onsite truck	—	—	HHDT
Conveyance - Open Cut Trench	—	—	—	—
Conveyance - Open Cut Trench	Worker	50.0	30.0	LDA,LDT1,LDT2
Conveyance - Open Cut Trench	Vendor	8.00	75.0	HHDT,MHDT
Conveyance - Open Cut Trench	Hauling	9.51	75.0	HHDT
Conveyance - Open Cut Trench	Onsite truck	—	—	HHDT
Tunneling - Outlet and Conveyance	—	—	—	—
Tunneling - Outlet and Conveyance	Worker	52.5	10.8	LDA,LDT1,LDT2
Tunneling - Outlet and Conveyance	Vendor	—	7.17	HHDT,MHDT
Tunneling - Outlet and Conveyance	Hauling	0.00	20.0	HHDT
Tunneling - Outlet and Conveyance	Onsite truck	—	—	HHDT
Dam Facilities - Spillway	—	—	—	—
Dam Facilities - Spillway	Worker	7.50	10.8	LDA,LDT1,LDT2
Dam Facilities - Spillway	Vendor	—	7.17	HHDT,MHDT
Dam Facilities - Spillway	Hauling	322	20.0	HHDT
Dam Facilities - Spillway	Onsite truck	—	—	HHDT

Dam Facilities - Site Restoration	—	—	—	—
Dam Facilities - Site Restoration	Worker	20.0	10.8	LDA,LDT1,LDT2
Dam Facilities - Site Restoration	Vendor	—	7.17	HHDT,MHDT
Dam Facilities - Site Restoration	Hauling	0.00	20.0	HHDT
Dam Facilities - Site Restoration	Onsite truck	—	—	HHDT
Pumping Plant	—	—	—	—
Pumping Plant	Worker	77.5	10.8	LDA,LDT1,LDT2
Pumping Plant	Vendor	—	7.17	HHDT,MHDT
Pumping Plant	Hauling	1.04	20.0	HHDT
Pumping Plant	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Dam Facilities - Site Preparation	—	—	—	—
Dam Facilities - Site Preparation	Worker	12.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Site Preparation	Vendor	2.00	75.0	HHDT,MHDT
Dam Facilities - Site Preparation	Hauling	0.00	20.0	HHDT
Dam Facilities - Site Preparation	Onsite truck	—	—	HHDT
Dam Facilities - Main Dam	—	—	—	—
Dam Facilities - Main Dam	Worker	12.0	30.0	LDA,LDT1,LDT2
Dam Facilities - Main Dam	Vendor	42.0	75.0	HHDT,MHDT
Dam Facilities - Main Dam	Hauling	0.00	20.0	HHDT
Dam Facilities - Main Dam	Onsite truck	—	—	HHDT
Dam Facilities - Outlet Works	—	—	—	—
Dam Facilities - Outlet Works	Worker	2.00	30.0	LDA,LDT1,LDT2
Dam Facilities - Outlet Works	Vendor	11.0	75.0	HHDT,MHDT
Dam Facilities - Outlet Works	Hauling	0.00	20.0	HHDT
Dam Facilities - Outlet Works	Onsite truck	—	—	HHDT

Conveyance - Open Cut Trench	—	—	—	—
Conveyance - Open Cut Trench	Worker	50.0	30.0	LDA,LDT1,LDT2
Conveyance - Open Cut Trench	Vendor	8.00	75.0	HHDT,MHDT
Conveyance - Open Cut Trench	Hauling	9.51	75.0	HHDT
Conveyance - Open Cut Trench	Onsite truck	—	—	HHDT
Tunneling - Outlet and Conveyance	—	—	—	—
Tunneling - Outlet and Conveyance	Worker	52.5	10.8	LDA,LDT1,LDT2
Tunneling - Outlet and Conveyance	Vendor	—	7.17	HHDT,MHDT
Tunneling - Outlet and Conveyance	Hauling	0.00	20.0	HHDT
Tunneling - Outlet and Conveyance	Onsite truck	—	—	HHDT
Dam Facilities - Spillway	—	—	—	—
Dam Facilities - Spillway	Worker	7.50	10.8	LDA,LDT1,LDT2
Dam Facilities - Spillway	Vendor	—	7.17	HHDT,MHDT
Dam Facilities - Spillway	Hauling	322	20.0	HHDT
Dam Facilities - Spillway	Onsite truck	—	—	HHDT
Dam Facilities - Site Restoration	—	—	—	—
Dam Facilities - Site Restoration	Worker	20.0	10.8	LDA,LDT1,LDT2
Dam Facilities - Site Restoration	Vendor	—	7.17	HHDT,MHDT
Dam Facilities - Site Restoration	Hauling	0.00	20.0	HHDT
Dam Facilities - Site Restoration	Onsite truck	—	—	HHDT
Pumping Plant	—	—	—	—
Pumping Plant	Worker	77.5	10.8	LDA,LDT1,LDT2
Pumping Plant	Vendor	—	7.17	HHDT,MHDT
Pumping Plant	Hauling	1.04	20.0	HHDT
Pumping Plant	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%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

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)
Pumping Plant	0.00	0.00	0.00	9,768	—
Tunneling - Outlet and Conveyance	0.00	0.00	0.00	813	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Dam Facilities - Site Preparation	0.00	0.00	110	0.00	—
Dam Facilities - Main Dam	0.00	0.00	1,753	0.00	—
Dam Facilities - Outlet Works	0.00	0.00	0.00	0.00	—
Conveyance - Open Cut Trench	0.00	49,766	81.8	0.00	—
Tunneling - Outlet and Conveyance	0.00	0.00	0.00	0.00	—
Dam Facilities - Spillway	840,000	0.00	0.00	0.00	—
Dam Facilities - Site Restoration	0.00	0.00	169	0.00	—
Pumping Plant	6,500	5,300	587	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%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Refrigerated Warehouse-No Rail	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
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Refrigerated Warehouse-No Rail	114	114	114	41,630	1,206	1,206	1,206	440,095

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Refrigerated Warehouse-No Rail	114	114	114	41,630	1,206	1,206	1,206	440,095

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

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)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Refrigerated Warehouse-No Rail	33,311,344	204	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Refrigerated Warehouse-No Rail	33,311,344	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Refrigerated Warehouse-No Rail	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Refrigerated Warehouse-No Rail	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

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
Grazing	Inceptisols	435	0.00

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Grazing	Inceptisols	435	0.00

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Grassland	435	0.00

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Grassland	435	0.00

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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	22.8	annual days of extreme heat
Extreme Precipitation	0.95	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	28.6	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 $\frac{3}{4}$ 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	1	0	0	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	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	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	62.8
AQ-PM	43.6
AQ-DPM	13.0
Drinking Water	98.3
Lead Risk Housing	53.0
Pesticides	88.0
Toxic Releases	14.7
Traffic	19.1
Effect Indicators	—
CleanUp Sites	88.5
Groundwater	92.1
Haz Waste Facilities/Generators	94.3
Impaired Water Bodies	100
Solid Waste	96.6
Sensitive Population	—
Asthma	38.7
Cardio-vascular	53.7
Low Birth Weights	27.9
Socioeconomic Factor Indicators	—
Education	83.8
Housing	12.3
Linguistic	57.8

Poverty	65.1
Unemployment	83.2

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	26.10034646
Employed	7.686385218
Median HI	23.99589375
Education	—
Bachelor's or higher	25.84370589
High school enrollment	11.18952906
Preschool enrollment	44.32182728
Transportation	—
Auto Access	83.51084306
Active commuting	40.60053895
Social	—
2-parent households	38.16245348
Voting	45.98999102
Neighborhood	—
Alcohol availability	81.80418324
Park access	10.09880662
Retail density	1.257538817
Supermarket access	11.84396253
Tree canopy	72.5907866
Housing	—
Homeownership	45.09174901

Housing habitability	58.89901193
Low-inc homeowner severe housing cost burden	60.91364045
Low-inc renter severe housing cost burden	53.57372001
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	28.16630309
Arthritis	0.0
Asthma ER Admissions	53.1
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	20.2
Cognitively Disabled	33.5
Physically Disabled	78.7
Heart Attack ER Admissions	33.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	41.4
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	0.1
SLR Inundation Area	0.0
Children	35.2
Elderly	70.0
English Speaking	15.8
Foreign-born	55.0
Outdoor Workers	4.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	94.7
Traffic Density	15.9
Traffic Access	0.0
Other Indices	—
Hardship	77.3
Other Decision Support	—
2016 Voting	64.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	76.0
Healthy Places Index Score for Project Location (b)	21.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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: Utility Information	Per project description
Construction: Construction Phases	Per project description
Construction: Off-Road Equipment	Per project description
Construction: Trips and VMT	Per project description
Construction: Architectural Coatings	Per project description
Operations: Vehicle Data	Per project description
Operations: Landscape Equipment	Per project description
Operations: Energy Use	Per project description
Operations: Architectural Coatings	Per project description
Operations: Water and Waste Water	Per project description
Operations: Solid Waste	Per project description
Operations: Refrigerants	Per project description
Construction: Dust From Material Movement	Per project description

Appendix G Environmental Protection Measures

Reclamation collaborated with the Project Proponents to develop Environmental Protection Measures (EPMs) to reduce environmental consequences associated with the construction and operation of the Del Puerto Canyon Reservoir project. The EPMs that may be implemented are included in this chapter in each resource section and also below in Table 3.0-1, Environmental Protection Measures. The EPMs correspond to measures that were developed in the Final EIR for the Project and include mitigation titles from the EIR, which use shortened designations for resource areas as follows:

Aesthetics - AES	Geology and Seismicity - GEO
Air Quality - AIR	Hazards and Hazardous Materials - HAZ
Terrestrial Biology – BIO-TERR	Hydrology and Water Quality - HYD
Fisheries Biology – BIO-FISH	Land Use - LU
Cultural Resources - CULT	Traffic and Transportation - TR

Table G-1: Environmental Protection Measures

Number	Description
1	AES-1: Implement Color Palette Consistent with Existing Environment The pumping plant's above-grade structures shall be painted a matte color consistent with the area's visual aesthetic, generally matte tan or light brown. Roofing for above-grade structures shall be matte as well to minimize potential glare.
2	AES-2: Nighttime Construction Lighting Nighttime construction lighting shall be shielded and oriented downward to minimize effects on any nearby receptors including habitat for wildlife species. Lighting shall be directed toward active construction areas only and shall have the minimum brightness necessary to ensure worker safety.
3	AES-3: Directional Lighting for Dam Control Building, Inlet/Outlet Works Control Building and Bifurcation Structure in Unincorporated Stanislaus County Nighttime lighting for the main dam's control building, the inlet/outlet control building, and bifurcation structure shall be equipped with directional shields that aim light downward and away from adjacent roadways and adjacent undeveloped areas that may provide habitat for wildlife species. In addition, the placement of lighting fixtures would be selected to concentrate light on-site to avoid spillover.
4	AIR-Imposed by SJVAPCD: Fugitive Dust Control All projects must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII: Control Measures for Construction Emissions of PM₁₀. According to Rule 8011, the SJVAPCD requires the implementation of control measures for fugitive dust emission sources. Dust management plans must be submitted to the SJVAPCD. The Project would implement the following control measures to reduce fugitive dust emissions and comply with SJVAPCD Regulation VIII: All disturbed areas, including storage piles, which are not being actively utilized for construction purposes shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.

G. Appendix G Environmental Protection Measures (Introduction)

Number	Description
	- All onsite unpaved roads and offsite unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. - All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. - When materials are transported offsite, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. - All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. - Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. - An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall implement measures to prevent carryout and trackout.
5	AIR-NO_x and Diesel Particulate Matter Controls In 2007, CARB adopted a regulation to reduce diesel particulate matter and NO_x emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. CARB approved amendments in 2009 and 2010. The regulation imposes limits on unnecessary vehicle idling to five minutes and requires fleets to reduce NO_x emissions by retiring, replacing, repowering, or installing exhaust retrofits to older engines. The restrictions on adding older vehicles into fleets vary by fleet size. On November 17, 2022, CARB (CARB 2022, 2023) approved amendments to the in-use, off-road diesel-fueled fleets regulation that require phasing out old, high-polluting vehicles (i.e., Tier 0/model year 1994 or older, Tier 1/model year 1999 or older, and Tier 2/model year 2003 or older) between 2024 and 2036. The amendment also restricts adding vehicles with Tier 3 or Tier 4 Interim engines/model year 2006 or older, beginning in 2024 for large or medium fleets (small fleets are given more time to comply). The regulation also mandates the use of R99 or R100 Renewable Diesel for all fleets, with limited exceptions, and provides flexibility options for fleets that adopt zero-emission technology. This regulation would apply to vehicles used in construction of the Project.
6	AIR-1: Reduce NO_x Emissions NO_x emissions associated with construction activities shall be reduced to 10 tons per year through on-site equipment and hauling vehicle mitigation measures to the extent feasible. All vehicles and equipment used during construction shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Emissions reduction methods may be chosen from any combination of the following measures: - Use of alternative fueled vehicles; - Use of newer tier engines (Tier 4 or better); - Use of phased material hauling trips; - Use of after-market pollution control devices to reduce emissions; and - Lengthening the construction schedule to reduce the annual intensity of construction activities. These NO_x emission reduction methods simultaneously address CO emissions. The CO emissions associated with construction activities shall be reduced below 100 tons per year through a combination of the same emission reduction measures identified to reduce NO_x. Before emissions associated with proposed Project activities begin, the Del Puerto Water District and San Joaquin River Exchange Contractors Water Authority (i.e., the Project Sponsors) shall be responsible for producing a SJVAPCD-approved air quality impact assessment analysis to determine the projected maximum Project emissions which incorporates the most current proposed equipment fleet, hours of operation, duration of work, and on-site NO_x reduction measures, based on final Project design and phasing. If all feasible on-site measures have been implemented and annual emissions are anticipated to still be above 10 tons per year for NO_x, then the Project Sponsors shall enter into a Voluntary Emissions Reduction Agreement (VERA) with SJVAPCD. The VERA would provide pound-for-pound mitigation of air emissions increases down to a net zero emissions per year as required under general conformity

G. Appendix G Environmental Protection Measures (Introduction)

Number	Description
	through a process that develops, funds, and implements emission reduction projects. To ensure emission reductions targeted by the VERA occur at the same time as Project emissions, and thereby achieve net zero annual emissions, the Project Sponsors shall enter into a VERA with SJVAPCD prior to any groundbreaking activities associated with proposed Project activities. SJVAPCD would serve as administrator of the emissions reduction projects and verifier of the successful mitigation effort. Under the VERA, the Project Sponsors shall agree to mitigate Project-specific emissions by providing funds for the SJVAPCD's Emission Reduction Incentive Program (ERIP). The funds would be disbursed by ERIP in the form of grants for projects that achieve emission reductions. Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors. The Project Sponsors would request that funding disbursement priority would be given to emission reduction projects of Project Sponsor landowners. The initial agreement would generally be based on the projected maximum emissions increases as calculated by a SJVAPCD-approved air quality impact assessment and contain the corresponding maximum fiscal obligation. However, because the goal is to mitigate actual emissions, the SJVAPCD has designed flexibility into the VERA such that the final mitigation would be based on actual emissions related to the Project as determined by actual equipment used, hours of operation, duration of work, and consideration of equipment control measures designed to alleviate Project emissions. After the Project is mitigated, the SJVAPCD would certify to the Project Sponsors that the mitigation is completed, providing the Project Sponsors with an enforceable mitigation measure demonstrating that Project-specific emissions have been mitigated to de minimis levels.
7	AIR-2: Best Performance Standards The Project Sponsors shall implement all feasible Best Performance Standards. The SJVAPCD defines Best Performance Standards as "the most effective in-practice means of reducing or limiting emissions from an emissions source." Types of Best Performance Standards that the proposed Project shall implement during construction could include but would not be limited to: • Use equipment types that rely on electric and/ or hybrid fuel. Note that biodiesel fuel use, while beneficial for reducing particulate matter emissions, does not have a substantial effect, and may actually increase, NO_x and CO_{2e} emissions. • Limit the size of the construction vehicle fleet, especially vehicles with high Hp (e.g., 5,000 Hp or more), as much as possible. • Limit the amount of time that construction vehicles are operating. • Maintain construction equipment in the best possible working order to maximize engine fuel efficiency. • All equipment shall be operated by a properly trained worker to minimize unnecessary vehicle use. • Encourage workers to carpool to and from the site. • Phase vendor and hauling trips. Types of Best Performance Standards that the proposed Project shall implement during long-term operations include: • Implement the most energy efficient equipment design possible. • Rely on alternative sources of energy, such as solar, hydro or wind power. • Encourage operations and maintenance employees to carpool or otherwise commute using a method other than a single-occupancy fossil-fuel powered vehicle.
8	BIO-TERR-1a Avoid and Minimize Impacts on Biological ResourcesThe Project Sponsors will incorporate the following measures into construction plans: • Employees and contractors performing construction and decommissioning activities will receive environmental sensitivity training. Training will include a review of environmental laws, mitigation measures, permit conditions, and other requirements that must be followed by all personnel to reduce or avoid effects on biological resources during construction activities. • Vehicles and equipment will be parked on pavement, existing roads, and previously disturbed areas to the extent practicable. • Off-road vehicle travel will be avoided outside of the construction footprint. • Grading will be restricted to the minimum area necessary.

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	• Prior to ground-disturbing activities, sensitive habitats will be flagged by a USFWS- and CDFW-approved biologist, and temporary fencing will be in place during construction to reduce the potential for vehicles and equipment to stray into these areas. • Vehicles or equipment will not be refueled within 100 feet of a wetland, stream, or other waterway unless a bermed and lined refueling area (i.e., with a created berm made of sandbags or other removable material) is constructed. • Erosion control measures will be implemented to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. Plastic monofilament netting (erosion control matting) or similar material containing netting will not be used at the Project site. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds. • The following will not be allowed at or near work sites on the Project site: trash dumping, firearms, open fires (e.g., barbecues), hunting, and pets. • First- and second-generation rodenticides will not be used within the Project site, except for the limited use of zinc phosphide or a rodenticide allowed for use by the California Department of Pesticide Regulation. • An approved biologist will be on-site during initial ground-disturbing activities within and adjacent to grassland areas and during the removal of any trees. The biologist will help the crew, as needed, comply with all implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that contractors maintain exclusion areas adjacent to sensitive biological resources and for documenting compliance with all biological resources-related mitigation measures. The biologist will have the authority to temporarily stop work to allow observed special-status species to move out of the work area (passively or relocated; as appropriate) or when any EPMs are not functioning appropriately for the protection of special-status species, following the requirements of all relevant environmental documents and permits.
9	BIO-TERR-1b: Avoid and Compensate for Adverse Effects on Special-Status Plant Species Surveys of grasslands must be conducted by qualified botanists in accordance with the appropriate protocols for special-status plants prior to the start of any construction activities. The surveys will be conducted in accordance with <i>Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities</i> (CDFW 2018c) during the season when special-status plant species would be evident and identifiable, which, generally, is during their blooming season. The surveys will be conducted no more than 3 years prior to the start of ground-disturbing activities. The results of the survey will be submitted to the Del Puerto Water District (DPWD), CDFW, and USFWS for review no less than 1 year prior to the start of ground-disturbing activities. The report will include the location and description of all proposed work areas and the location and description of all occupied habitat for special-status plant species. It will identify locations where effective avoidance measures could be implemented. In areas where no special-status plant species are present, no further mitigation would be required. Where surveys determine that a special-status plant species is present in or adjacent to a work area, where temporary ground-disturbing activities would take place, impacts due to the chosen Action Alternative will be avoided through the establishment of activity exclusion zones, within which no ground-disturbing activities will take place, including construction staging, or other temporary work areas. Activity exclusion zones for special-status plant species will be established around each occupied habitat site, the boundaries of which will be clearly marked with standard orange plastic construction exclusion fencing or its equivalent. The establishment of activity exclusion zones will not be required if no construction-related disturbances will occur within 250 feet of the occupied habitat. The size of activity exclusion zones may be reduced through consultation with a qualified biologist and concurrence from USFWS and CDFW, based on site-specific conditions. Prior to any activities that would result in permanent impacts on special-status plants, compensation habitat for each affected species will be acquired and permanently protected at a minimum compensation ratio of 2 acres protected for every 1 acre that would be lost and may be a combination of off-site restoration/creation and mitigation credits. Final compensation ratios will be based on site-specific information and determined through coordination with state and federal agencies (e.g., CDFW and USFWS) during permit processing. Compensation habitat will consist of existing off-site occupied habitat acquired in fee, through conservation easements, or by purchasing credits from a certified conservation bank or mitigation bank. The purchase of mitigation credits or the establishment of onsite or offsite mitigation areas (or a combination of the two) would be completed as agreed

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	upon by the Project Partners, USFWS, and/or CDFW, as appropriate for the species being mitigated. If onsite or offsite occupied habitat is acquired (permittee-responsible mitigation), the habitat will require monitoring by the Project Partners. If credits are purchased from a certified bank, no further monitoring will be required. The Project Partners will monitor any permittee-responsible mitigation habitat annually for a minimum of 5 years, or as required by the regulating agency, to verify that the habitat suitability and extent of species cover are maintained. For these mitigation areas, the Project Partners will prepare and implement a long-term management plan for each compensation habitat. The plan will include requirements to monitor the occupied habitat, including the special-status species absolute and relative cover, cover of other native species, and cover of invasive species. The plan will determine and implement appropriate management measures to maintain the habitat and the plant species cover, at the same or greater extent as when the occupied habitat was acquired. Management measures may include removal of invasive plant species. The Project Partners will submit annual monitoring reports for a minimum of 5 years, or as required by the regulating agency, for review and verification that the chosen Action Alternative remains in compliance with the mitigation requirements
10	BIO-TERR-1c: Avoid, Minimize, and Compensate for the Loss of Habitat Occupied by Vernal Pool Fairy Shrimp and/or Vernal Pool Tadpole Shrimp <u>Preconstruction Protocol-level Surveys</u> At least 1 year prior to affecting any of the potential vernal pool branchiopod habitat, a biologist with a 10(a)(1)(A) recovery permit for vernal pool branchiopods will conduct protocol-level surveys for federally listed vernal pool branchiopods following the USFWS 2015 <i>Survey Guidelines for the Listed Large Branchiopods</i>. These surveys require the completion of one dry-season survey and one wet-season survey. <u>Avoidance and Minimization Measures</u> To the extent practicable, construction areas will avoid direct or indirect (i.e., activities that would alter hydrology within 250 feet of vernal pool habitat) impacts on vernal pool habitat. If avoidance within 250 feet of habitat is not possible, those work areas will be assessed for their potential to alter the hydrology of the pool habitat such that the hydroperiod of the pool will no longer support the species. Where the USFWS and CDFW agree that any changes to the hydroperiod will not permanently affect habitat functionality, compensatory mitigation would not be required. Where avoidance is not possible, and construction occurs within 250 feet of vernal pool habitat, EPM BIO-TERR-1a: <i>Avoid and Minimize Impacts on Biological Resources</i> will be implemented to ensure that construction activities minimize effects on the habitat by requiring environmental sensitivity training for construction personnel, installing flagging and/or protective fencing around sensitive habitats, installing erosion control measures, and presence of a biological monitor to ensure all relevant EPMs are maintained for the duration of construction. <u>Compensation</u> If federally listed branchiopods are determined to be present in permanent disturbance areas and avoidance is not possible, then the Project Sponsors will compensate for the loss of federally listed vernal pool branchiopod habitat through the purchase of credits from a USFWS- and CDFW approved mitigation bank at a minimum conservation acreage ratio of 2:1 for protection and 1:1 for restoration. Compensation ratios will be based on site-specific information and determined through coordination with state and federal agencies (e.g., CDFW and USFWS).
11	BIO-TERR-1d: Avoid, Minimize, and Compensate for Impacts of Valley Elderberry Longhorn Beetle <u>Preconstruction Exit Hole Surveys</u> Prior to filling the reservoir, all elderberry shrubs in the inundation footprint will be surveyed for exit holes following the guidance in the 2017 USFWS <i>Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle</i> (Framework) to determine if they are occupied by valley elderberry longhorn beetle. <u>Avoidance and Minimization Measures</u> The measures outlined below come from the USFWS 2017 Framework. They are to be implemented where construction would occur within 165 feet of elderberry shrubs.

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	• Fencing. All areas to be avoided during construction activities will be fenced and/or flagged as close to construction limits as feasible. • Avoidance Area. Activities that may damage or kill an elderberry shrub (e.g., trenching, paving) may need an avoidance area of at least 6 meters (20 feet) from the drip-line, depending on the type of activity. • Worker Education. A qualified biologist will provide training for all contractors, work crews, and any on-site personnel on the status of the valley elderberry longhorn beetle, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance. • Construction Monitoring. A qualified biologist will monitor the work area at appropriate intervals to ensure that all avoidance and minimization measures are implemented. The amount and duration of monitoring will depend on the specifics of the chosen Action Alternative and will be discussed with the USFWS biologist. • Timing. As much as feasible, all activities that could occur within 50 meters (165 feet) of an elderberry shrub will be conducted outside of the flight season of the valley elderberry longhorn beetle (March–July). • Trimming. Trimming may remove or destroy valley elderberry longhorn beetle eggs and/or larvae and may reduce the health and vigor of the elderberry shrub. To avoid and minimize adverse effects on valley elderberry longhorn beetle when trimming, trimming will occur between November and February and will avoid the removal of any branches or stems that are 1 inch or more in diameter. Measures to address regular and/or large-scale maintenance (trimming) will be established in consultation with USFWS. • Chemical Usage. Herbicides will not be used within the drip-line of the shrub. Insecticides will not be used within 30 meters (98 feet) of an elderberry shrub. All chemicals will be applied with use of a backpack sprayer or similar direct application method. • Mowing. Mechanical weed removal within the drip-line of the shrub will be limited to the season when adults are not active (August–February) and will avoid damaging the elderberry. • Erosion Control and Re-vegetation. Erosion controls will be implemented and the affected area will be re-vegetated with appropriate native plants. <u>Compensation</u> If no occupied shrubs would be lost, no compensatory mitigation would be required. If shrubs determined to be occupied by valley elderberry longhorn beetle are lost due to construction and/or inundation, the Project Sponsors will compensate for the loss of individual shrubs by purchasing credits at a USFWS-approved mitigation bank. Per the USFWS 2017 Framework, those shrubs that can be transplanted (i.e., those not on cliffs and those that are likely to withstand transplantation) will also be moved to the USFWS-approved mitigation bank. The specific location for the mitigation will be developed during the Reclamation’s consultation with USFWS.
12	BIO-TERR-1e: Avoid and Minimize on Special-Status Amphibians <u>Conduct Protocol Level Surveys</u> To guide implementation of avoidance and minimization measures, protocol-level surveys for California tiger salamander, California red-legged frog, and foothill yellow-legged frog will be conducted by a USFWS- and CDFW-approved biologist who possesses the necessary handling permits (California tiger salamander only). • California tiger salamander surveys will be conducted in potentially suitable habitat within the Project site, and accessible areas within 2 km, according to the USFWS and CDFW Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander (USFWS and CDFW 2003) or the most up-to-date survey protocol at that time. • California red-legged frog surveys will be conducted in potentially suitable habitat in the Project site, and surrounding 1.6 km, according to the USFWS Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (USFWS 2005) or the most up-to-date survey protocol at that time.

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	• Foothill yellow-legged frog surveys will be conducted in the Project site according to CDFW's Considerations for Conserving the Foothill Yellow-Legged Frog (CDFW 2018b) or the most up-to-date survey protocol at that time. No specific protocol has been developed for western spadefoot toad. Presence will be determined by conducting surveys during the winter and spring to identify adults, egg masses, larvae, and/or metamorphs. Surveys will be conducted during the breeding season and timed to document breeding adults at potential breeding ponds. Auditory surveys will be conducted to listen for calling males. Because potential breeding habitat may be far from accessible roads, and spadefoots breed during rainfall events, Remote Auditory Recording Devices (RARDs) and analysis software (e.g., Kaleidoscope) may be deployed to assist in documenting this species at hard-to-reach sites within the study areas. <u>Avoidance and Minimization Measures</u> The measures outlined below will be implemented to avoid and minimize direct and indirect effects on special-status amphibians during construction, operation, and maintenance activities. • Ground disturbance will be limited to permanent and temporary impact areas identified in the final plans for the reservoir. • Suitable aquatic habitats needed for access to, and construction of, saddle dams will be avoided during construction by placing high-visibility fencing around the suitable habitat areas. The fencing will be open at the bottom to allow wildlife to move in and out of the pond. • The approved biologist will be present during all ground-disturbing activities and any activities involving heavy equipment used in or adjacent to suitable upland and/or aquatic habitat. • Maintenance activities in vegetated areas will be conducted during the dry season (generally April 1 to October 14) and will avoid and minimize any disturbance of small mammal burrows. Use of first- and second-generation rodenticides will not be permitted, except for the limited use of zinc phosphide or a rodenticide allowed for use by the California Department of Pesticide Regulation. • Within habitat for California tiger salamander, California red-legged frog, and western spadefoot toad, initial ground-disturbing activities will not take place during the rainy season, generally October 15 to March 31, or until the first measurable rain of 1 inch or more occurs, to avoid the period when most amphibian movement across upland habitat is expected to occur. • Ground-disturbing activities may take place during the wet season in areas where potential habitat for special-status amphibians has been removed when an approved biologist is present to monitor activities. • When work occurs in special-status amphibian habitat, the approved biologist will conduct a pre-activity survey immediately prior to work beginning. The biologist will inspect beneath equipment, vehicles, and stored materials that have been left in the work area overnight. • If a special-status amphibian is found in a work area, it will at first be allowed to move out of the work area on its own. However, if there is no suitable habitat for the animal to freely move to, it will be relocated by the approved biologist to a pre-determined location identified in coordination with USFWS and CDFW. • To prevent the accidental entrapment of species during construction, all excavated trenches and holes deeper than 6 inches will be ramped at the end of the workday to allow trapped animals a means of escaping. Earthen ramps will be constructed at each end of the active trench, and boards will be placed in open holes. Each day that a trench and/or hole is open prior to backfilling, these areas will be inspected by a USFWS- and CDFW-approved monitor. If an animal is found trapped in a trench or hole, construction will cease until it exits the trench or hole on its own or is relocated to an approved location by a USFWS- and CDFW-approved biologist. • If work in suitable special-status amphibian habitat occurs during the rainy season, generally October 15 to March 31, lasting for more than 1 day, exclusion fencing will be installed between the work area and area of suitable habitat. A USFWS- and CDFW-approved biologist will determine where exclusion fencing will be installed. The fencing will be installed to a depth of 6 inches and be at least 36 inches above grade. The contractor will avoid placing fencing on top of the burrows of ground squirrels. A qualified biologist will inspect the fencing daily for the presence of these species. • If the exclusion fence is found to be compromised at any time, a survey will be conducted immediately preceding construction activity that occurs in special-status amphibian habitat or in advance of any activity that may result in take of the species. The biologist will search along exclusion fences, in pipes, and beneath vehicles before they are moved. The survey will include a careful inspection of all potential hiding spots, such

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	as along exclusion fencing; within areas of large woody debris; and on the perimeter of ponds, wetlands, and riparian areas. Any special-status amphibians found will either be allowed to move of its own accord or will be captured and relocated, as described above. Between the time when construction begins and the reservoir is filled, if construction activities occur in streams, temporary aquatic barriers (e.g., hardware cloth) will be installed both upstream and downstream of the in-stream work area. Special-status amphibians will be relocated and excluded from the work area. The approved biologist will establish an adequate buffer on both sides of creeks and around potential aquatic habitat and restrict entry during the construction period. If the use of pumps is necessary for diverting flows or dewatering during construction of the dam, pump intakes will be fitted with a screen-type device, consisting of, at a minimum, a water intake strainer. Water intake strainers are most appropriate for low-volume diversion projects. For high-volume water diversion projects or other diversion activities that may warrant greater protection, pump intakes will be fitted with screens made of woven mesh, a perforated plate, or wedge wire. The screen medium must be able to withstand forces related to pumping and be of sufficient size to prevent amphibian larvae from entering the intake and being diverted within the water.
13	BIO-TERR-1f: Compensation for the Loss of California Tiger Salamander Habitat If protocol-level surveys determine that California tiger salamander is not present in the study area, then no further mitigation is required. If California tiger salamander is present in aquatic and upland habitat in the study area, the habitat permanently lost due to the chosen Action Alternative will be mitigated at a minimum of 1:1. Mitigation will be achieved through either purchasing credits at a USFWS- and CDFW-approved mitigation bank or through the purchase of a conservation easement with an associated endowment approved by USFWS and CDFW. Any conservation lands will be shown to be occupied by California tiger salamander and will be managed in perpetuity for the benefit of the species. Details of the mitigation will be further developed in consultation with USFWS and CDFW.
14	BIO-TERR-1g: Compensate for the Loss of California Red-legged Frog Habitat If protocol-level surveys determine that California red-legged frog is not present, no compensatory mitigation would be required. If California red-legged frog is present in aquatic and upland habitat in the study area, the habitat permanently affected due to the chosen Action Alternative will be mitigated at a minimum of 1:1. Mitigation will be achieved through either purchasing credits at a USFWS-approved mitigation bank or through the purchase of a conservation easement with an associated endowment approved by USFWS. Any conservation lands will be shown to be occupied by California red-legged frog and will be managed in perpetuity for the benefit of the species. Details of the mitigation will be further developed in consultation with USFWS.
15	BIO-TERR-1h: Compensate for the Loss of Foothill Yellow-legged Frog Habitat If surveys determine that foothill yellow-legged frog is not present, no further mitigation is necessary. If foothill yellow-legged frog is present, the habitat permanently affected due to the chosen Action Alternative will be fully mitigated by either purchasing property and/or a conservation easement that contains stream habitat of similar quality and quantity and that is currently occupied by foothill yellow-legged frog and/or represents an area that has been historically occupied and where successful recolonization is likely (e.g., known occupation in nearby watershed or tributary). A final mitigation plan will be developed and approved by CDFW. The plan will include measures for the long-term management of these lands for the benefit of foothill yellow-legged frog and include adaptive management measures.
16	BIO-TERR-1i: Avoid and Minimize Impacts on Special-Status Reptiles The following measures will be implemented to ensure that the chosen Action Alternative does not have an adverse impact on special-status reptiles: - The approved biologist monitoring construction will survey for special-status reptiles in areas of suitable habitat immediately prior to initial ground-disturbing activities and vegetation removal. If special-status reptiles are not found, no additional measures are required. - If any special-status reptiles are found, work will not begin until they are allowed to passively move out of the work area or are relocated to a CDFW-approved relocation site. Relocation of these species would require consulting with CDFW and a letter from CDFW authorizing this activity.

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	○ No monofilament plastic will be used for erosion control. ○ The approved biologist will inspect open trenches and pits and under construction equipment and materials left on-site for special-status reptiles each morning before equipment and materials are moved. ○ Ground disturbance in suitable habitat will be minimized to the extent practicable. ○ Vegetation outside the work area will not be removed. All vegetation removal will be monitored by the approved biologist to minimize impacts on special-status reptiles.
17	BIO-TERR-1j: Avoid and Minimize Impacts on Western Burrowing Owl The following measures, which were based on the <i>Staff Report on Burrowing Owl Mitigation</i> (California Department of Fish and Game 2012), will be implemented to avoid and minimize potential adverse impacts on burrowing owls prior to and during construction and maintenance activities that require large areas of ground disturbance (e.g., grading): • A qualified biologist will conduct preconstruction take avoidance surveys for burrowing owl 14 days prior to ground-disturbing activities and a second survey within 24 hours of initiating ground-disturbing activities and before reservoir inundation. The survey area will encompass the work area and a 500-foot buffer around this area as well as the inundation area. If no burrowing owls are found, then no further mitigation would be required, unless there is a lapse in time greater than 14 days before the start of construction activities. • To the maximum extent feasible, construction activities within 500 feet of active burrowing owl burrows will be avoided during the nesting season (February 1–August 31). • If an active burrow is identified near a proposed work area and work cannot be conducted outside the nesting season (February 1–August 31), a no-activity zone will be established by a biologist experienced with burrowing owls in coordination with CDFW. • If burrowing owls are present at the site during the non-breeding season (September 1–January 31), a qualified biologist will establish a no-activity zone that extends a minimum of 150 feet around the burrow. • If the designated no-activity zone for either breeding or non-breeding burrowing owls cannot be established, a wildlife biologist experienced in burrowing owl behavior will evaluate site-specific conditions and, in coordination with CDFW, recommend a smaller buffer (if possible) that still minimizes the potential to disturb the owls. The site-specific buffer will consider the type and extent of the proposed activity occurring near the occupied burrow, the duration and timing of the activity, the sensitivity and habituation of the owls, and the dissimilarity of the proposed activity to background activities. • If burrowing owls are present in the direct disturbance area and cannot be avoided during the non-breeding season (generally September 1–January 31), passive relocation techniques (e.g., installing one-way doors at burrow entrances) may be used. Passive relocation may also be used during the breeding season (February 1–August 30) if a biologist with burrowing owl experience, in coordination with CDFW, determines through site surveillance and/or scoping that the burrow is not occupied by burrowing owl adults, young, or eggs. Passive relocation will be accomplished by installing one-way doors (e.g., modified dryer vents or other CDFW-approved method), which will be left in place for a minimum of 1 week and monitored daily to ensure that the owls have left the burrow. Excavation of the burrow will be conducted using hand tools. During excavation of the burrow, a section of flexible plastic pipe (at least 3 inches in diameter) will be inserted into the burrow tunnel to maintain an escape route for any animals that may be inside the burrow. • Any owls in occupied burrows within the reservoir footprint will be relocated using passive relocation techniques. • Destruction of unoccupied burrows outside the work area will be avoided and visible markers will be placed near burrows to ensure that they have not collapsed. • Ongoing surveillance of the Project site will be conducted for burrowing owls during construction activities. If additional owls are observed using burrows within 500 feet of construction, the on-site biological monitor will determine, in coordination with CDFW, if the owls are or would be affected by construction activities and if additional exclusion zones are required. If burrowing owls are detected during preconstruction surveys, the Project Sponsors will compensate for the loss of burrowing habitat according to the guidelines in <i>Staff Report on Burrowing Owl Mitigation</i> (California Department of Fish and Game 2012). These guidelines do not recommend minimum habitat replacement ratios but do note that the conservation area should be comparable to or better than the impact area, large enough with respect to acreage, and support burrowing mammals. Any such conservation may be combined with conservation areas developed for

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	Swainson's hawk and/or San Joaquin kit fox. If burrowing owl conservation is appropriate on these lands, the respective mitigation and monitoring plans developed will be modified to include measures for the maintenance and enhancement of habitat for burrowing owl.
18	BIO-TERR-1k: Avoid and Minimize Impacts on Nesting Birds To the maximum extent practicable, the removal of structures and vegetation (e.g., trees, shrubs, ground vegetation) will take place during the non-breeding season for most migratory birds (generally September 1-February 1). This timing is highly preferable because if an active nest is found during preconstruction surveys in a tree (or other vegetation) that would be removed by construction, the tree (or other vegetation) would not be allowed to be removed until the end of the nesting season or until the nestlings have fledged, which could delay construction. If vegetation cannot be removed during the non-nesting season, or if ground cover re-establishes in areas where vegetation has been removed, the affected area must be surveyed for nesting birds. Should structure and vegetation removal activities occur between February 15 and September 30, a qualified biologist will conduct preconstruction surveys for active nesting birds. If an active nest is found in the survey area, a no-disturbance buffer area will be established around the nest site to avoid disturbance or destruction of the nest until the end of the breeding season or until after a qualified wildlife biologist determines that the young have fledged and moved out of the study area (timing varies by species). Buffers will be developed by the biologist, based on the species' nesting behavior, their sensitivity to disturbance, the type of work taking place during the nesting season, and the surrounding topography and vegetation, which may attenuate noise and block visual disturbances. Buffers will be a minimum of 50 feet from disturbance for more common ground-nesting birds and a minimum of 500 feet for tree-nesting raptors. Initial reservoir filling will begin outside the nesting season.
19	BIO-TERR-1l: Avoid and Minimize Impacts on Swainson's Hawk The Project Sponsors will retain a wildlife biologist experienced in surveying for Swainson's hawk to conduct surveys for the species in the spring/summer prior to construction. The surveys will be conducted within the limits of disturbance and in a buffer area up to 0.25 mile from the limits of disturbance. The size of the buffer area surveyed will be based on the type of habitat present and the line of sight from the construction area to surrounding suitable breeding habitat. Surveys will follow the methods in <i>Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley</i> (Swainson's Hawk Technical Advisory Committee 2000). A minimum of six surveys will be conducted from January to March 20 to determine potential nest sites, from March 20 to April 20 to document breeding and nesting, and from June 10 to July 30 to determine post-fledging success. If a variance in the survey distance or number of surveys is necessary, the Project Sponsors will coordinate with CDFW regarding appropriate survey methods, based on proposed construction activities. Generally, surveys will be conducted from February to July. Survey methods and results will be reported to the Project Sponsors and CDFW. The removal of trees within the reservoir inundation area will take place outside the Swainson's hawk nesting season. Active Swainson's hawk nests within 600 feet of the areas of active construction activities will be monitored by a wildlife biologist with experience in monitoring Swainson's hawk nests. The monitor will document the location of active nests, coordinate with the Project Sponsors and CDFW, and record all observations in a daily monitoring log. The monitor will have the authority to temporarily stop work if activities are disrupting nesting behavior to the point of resulting in potential take (i.e., eggs and young chicks are still in the nest, and adults appear agitated and could abandon the nest). The monitor will work closely with the contractor, the Project Sponsors, and CDFW to develop plans for minimizing disturbance, such as modifying or delaying certain construction activities. A minimum non-disturbance buffer of 600 feet (radius) will be established around all active Swainson's hawk nests. No entry of any kind related to construction will be allowed within this buffer while the nest is active, unless approved by CDFW through issuance of an Incidental Take Permit or through coordination during construction. The buffer size may be modified, based on site-specific conditions, including line of sight, topography, type of disturbance, existing ambient noise and disturbance levels, and other relevant factors. Entry into the buffer for construction activities will be granted when the biological monitor determines that the young have fledged and are capable of independent survival or that the nest has failed and the nest site is no longer active. All buffer adjustments will be approved by CDFW.

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20	BIO-TERR-1m: Compensate for the Loss of Swainson’s Hawk Foraging Habitat The permanent loss of Swainson’s hawk foraging habitat will be mitigated according to the guidance in the <i>Staff Report Regarding Mitigation for Impacts to Swainson’s Hawks (Buteo swainsoni) in the Central Valley of California</i> (California Department of Fish and Game 1994). This guidance includes recommended mitigation ratios, based on the proximity to an active nest (i.e., used during one or more of the last 5 years preceding the initiation of the activity).
21	BIO-TERR-1n: Avoid and Minimize Impacts on Bats To avoid and minimize potential impacts on pallid bat, western red bat, and non-special-status bat species from the removal of trees and buildings, the Project Sponsors will implement the actions outlined below. <u>Preconstruction Surveys</u> Within 2 weeks prior to rock outcrop disturbance, tree removal, and any building demolition (e.g., sheds and other outbuildings), a qualified biologist will examine rock outcrops to be disturbed, trees to be removed, and buildings planned for demolition for suitable bat roosting habitat. High-quality habitat features (e.g., deep crevices, large tree cavities, basal hollows, loose or peeling bark, larger snags, abandoned buildings) will be identified and the area around these features searched for bats and bat sign (e.g., guano, culled insect parts, staining). Riparian woodland and stands of mature broadleaf trees will be considered potential habitat for solitary foliage-roosting bat species. If suitable roosting habitat and/or bat sign is detected, biologists will conduct an evening visual emergence survey of the source habitat feature from a half hour before sunset to 1 to 2 hours after sunset for a minimum of two nights. Full-spectrum acoustic detectors will be used during emergence surveys to assist in species identification. Detectors will be set to record bat calls for the duration of each night. All emergence and monitoring surveys will be conducted during favorable weather conditions (i.e., calm nights with temperatures conducive to bat activity and no precipitation predicted). The biologist will analyze the bat call data using appropriate software and prepare a report that will be submitted to the Project Sponsors and CDFW. <u>Timing of Rock Outcrop Disturbance, Tree Removal, and Building Demolition</u> Rock outcrops, trees, and buildings planned for removal and demolition will have exclusion devices installed between September 15 and October 31 to avoid affecting maternal and hibernating bat roosts. The exact timing of removal and demolition will be based on the results of preconstruction surveys of rock outcrops, trees, and buildings (i.e., if it is determined bats are present). <u>Protective Measures</u> Protective measures may be necessary if it is determined that bats are using rock outcrops, trees, or buildings in work areas as roost sites or if special-status bat species are detected during acoustic monitoring. The measures outlined below will be implemented when roosts are found within rock outcrops, trees, or buildings planned for removal according to the timing discussed above. Specific measures will be approved by the Project Sponsors and CDFW prior to excluding bats from occupied roosts. • Exclusion from roosts will take place late in the day or in the evening to reduce the likelihood of evicted bats falling prey to diurnal predators and will take place during weather and temperature conditions conducive to bat activity. • Biologists experienced with bats and bat evictions will carry out or oversee the exclusion tasks and monitor rock outcrop disturbance, tree removal, and building demolition if the affected areas are determined to be occupied. When entering areas that may have concentrations of bats, such as maternity colonies, biologists will implement decontamination procedures to prevent or reduce the human-based transmission of white-nosed syndrome following the <i>National White-nose Syndrome Decontamination Protocol</i> (White-nose Syndrome Disease Management Working Group 2024), or more current guidance if available. • Trees that provide suitable roost habitat will be removed in pieces, rather than felling the entire tree, and late in the day or in the evening to reduce the likelihood of evicted bats falling prey to diurnal predators. Removal will take place during warm weather that is conducive to bat activity. • Structural changes may be made to a known roost that has been proposed for removal to create conditions that would be undesirable for roosting bats and encourage the bats to leave on their own (e.g., open additional portals so that the temperature, wind, light, and precipitation regime in the roost change). Structural changes to the roost

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	will be authorized by CDFW and will be performed during the appropriate exclusion timing (listed above) to avoid harming bats. • Non-injurious harassment at the roost site, such as ultrasound deterrents or other sensory irritants, may be used to encourage bats to leave on their own. • One-way door devices will be used where appropriate to allow bats to leave the roost but not return. Prior to rock outcrop disturbance, tree removal/trimming, and/or building demolition, and after other eviction efforts have been attempted, any confirmed roost site will be gently shaken or repeatedly struck with a heavy implement such as a sledgehammer or an axe. Several minutes will pass before beginning disturbance, felling trees, or beginning demolition work to allow bats time to arouse and leave the roost. A biological monitor will search downed vegetation for dead and injured bats. The presence of dead or injured bats will be reported to CDFW. Injured bats will be transported to the nearest CDFW-permitted wildlife rehabilitation facility.
22	BIO-TERR-1o: Avoid and Minimize Impacts on San Joaquin Kit Fox The following measures have been adapted from the USFWS U.S. Fish and Wildlife Service Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance (Standard Recommendations) (USFWS 2011). A qualified biologist will conduct a preconstruction survey within the limits of proposed temporary and permanent construction footprints, no less than 14 days and no more than 30 days before the beginning of ground disturbance. The biologist will conduct den searches by systematically walking transects spaced 30 to 100 feet apart through the study area. Transect distance will be determined by the height of vegetation such that 100 percent visual coverage of the disturbed ground is achieved. If dens are found during the survey, the biologist will map the location of each den; record the size and shape of the den entrance; note the presence of tracks, scat, or prey remains; and determine if the den was recently excavated. Dens will be classified as one of the following four den status categories: • Potential Den: Any subterranean hole within the species' range that has entrances with appropriate dimensions (5 to 8 inches in diameter) and the available evidence is sufficient to conclude that it is being used or has been used by a San Joaquin kit fox. Potential dens comprise (1) any suitable subterranean hole or (2) any den or burrow of another species (e.g., coyote, badger, red fox, ground squirrel) that otherwise has appropriate characteristics for San Joaquin kit fox use. • Known Den: Any existing natural den or artificial structure that is used or has been used at any time in the past by a San Joaquin kit fox. Evidence of use may include historical records; past or current radio telemetry or spotlighting data; San Joaquin kit fox signs such as tracks, scat, and/or prey remains; or other reasonable proof that a given den is being used or has been used by a San Joaquin kit fox. • Natal or Pupping Den: Any den used by San Joaquin kit fox to whelp and/or rear their pups. Natal/pupping dens may be larger and may have more entrances than dens occupied exclusively by adults. These dens typically have more San Joaquin kit fox tracks, scat, and prey remains in the vicinity of the den and may have a broader apron of matted dirt and/or vegetation at one or more entrances. A natal den, defined as a den in which San Joaquin kit fox pups are whelped but not necessarily reared, is a more restrictive version of the pupping den. In practice, however, it is difficult to distinguish between the two; therefore, for purposes of this definition, either term applies. • Atypical Den: Any artificial structure that has been or is occupied by a San Joaquin kit fox. Atypical dens may include pipes, culverts, and diggings beneath concrete slabs and buildings. If no potential dens are present, no further avoidance measures would be required. If potential San Joaquin kit fox dens are present, their disturbance and destruction will be avoided. Results of the survey will be submitted to USFWS and CDFW within 1 week of the completion of the survey and prior to the beginning of ground disturbance and/or construction activities that are likely to affect San Joaquin kit fox. If dens are located within the Project site, the following avoidance buffers will be applied: • Potential Den – 50 feet • Atypical Den – 50 feet • Known Den – 100 feet

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	Natal/Pupping Den – USFWS and CDFW will be contacted for further guidance If the den is within the construction footprint and/or reservoir inundation area and avoidance buffers are not possible, then dens may be collapsed following the guidance in the Standard Recommendations. Additional avoidance and minimization measures identified in the Standard Recommendations will be implemented during construction in suitable kit fox habitat.
23	BIO-TERR-1p: Compensate for the Loss of San Joaquin Kit Dispersal Habitat To compensate for the loss of potential kit fox dispersal habitat, the Project Sponsors will obtain conservation easements on properties at agency-approved acreage replacement ratios along the I-5/California Aqueduct corridors from Sperry Avenue/Diablo Grande Parkway (at I-5) north to the area around Del Puerto Creek to improve San Joaquin kit fox dispersal habitat in this area. Suitable areas for conservation easements are from east of I-5 to the California Aqueduct or west of I-5 between I-5 and the proposed dam structure. Both areas currently have abandoned orchards with dense understories of herbs and grasses that are unusable for San Joaquin kit fox. Improvements may include, but would not be limited to, removing old orchards, implementing vegetation management to keep herbs and grasses short, improving conditions for ground squirrel colonization (e.g., removing thatch, discontinuing rodent control measures), and providing artificial kit fox dens along this corridor. A final mitigation plan will be developed with input from USFWS and CDFW during consultation with the agencies. The plan will include measures for the long-term management of these lands for the benefit of San Joaquin kit fox dispersal and include adaptive management measures.
24	BIO-TERR-1q: Avoid and Minimize Impacts on American Badger A qualified biologist will conduct a preconstruction survey within the limits of proposed temporary and permanent construction footprints no more than 30 days before the beginning of ground disturbance. The biologist will conduct den searches by systematically walking transects spaced 30 to 100 feet apart through the study area. Transect distance will be determined on the basis of the height of vegetation such that 100 percent visual coverage of the disturbed ground area is achieved. If dens are found during the survey, the biologist will map the location of each den; record the size and shape of the den entrance; note the presence of tracks, scat, and prey remains; and determine if the den was recently excavated. If no dens are found, no further mitigation is necessary. If potential American badger dens are located within work areas and cannot be avoided during construction, a qualified biologist will determine if the dens are occupied or were recently occupied using remote cameras, media tracking, or methodology coordinated with CDFW. If unoccupied, the qualified biologist will request permission from CDFW to temporarily plug the burrow entrance with sandbags to prevent badgers from re-using them during construction and, if necessary, collapse the dens by hand. If occupied, the biologist will consult with CDFW regarding best practices for encouraging the badger(s) to move to alternate dens outside the work areas; this includes the excavation or the construction of artificial dens.

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25	BIO-TERR-1r: Avoid and Compensate for Adverse Effects on Special-Status Plant Species in Ingram Canyon Access to the private properties in the Ingram Canyon study area was not allowed by the property owners. Therefore, surveys for several special-status plants were not conducted for Alternative 5 (Ingram Canyon Alternative). If Alternative 5 becomes the chosen Action Alternative, surveys of the Ingram Canyon study area must be conducted for special-status plants prior to the start of any construction activities. The surveys will be conducted by qualified botanists in accordance with <i>Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities</i> (CDFW 2018c) during the season when special-status plant species would be evident and identifiable, which, generally, is during their blooming season. The surveys will be conducted no more than 3 years prior to the start of ground-disturbing activities. The results of the survey will be submitted to DPWD and CDFW for review no less than 1 year prior to the start of ground-disturbing activities. The report will include the location and description of all proposed work areas, the location and description of all occupied habitat for special-status plant species, and locations where effective avoidance measures could be implemented. In areas where no special-status plant species are present, no further mitigation would be required. If surveys determine that a special-status plant species is present in or adjacent to an area where temporary ground-disturbing activities would take place, potential impacts will be avoided through establishment of activity exclusion zones within which no ground-disturbing activities will take place, including construction staging, or other temporary work areas. Activity exclusion zones for special-status plant species will be established around each occupied habitat site, the boundaries of which will be clearly marked with standard orange plastic construction exclusion fencing or its equivalent. The establishment of activity exclusion zones will not be required if no construction-related disturbances will occur within 250 feet of the occupied habitat. The size of activity exclusion zones may be reduced through consultation with a qualified biologist and with concurrence from CDFW, based on site-specific conditions. Prior to any activities that would result in permanent impacts on special-status plants, compensation habitat for each affected species will be acquired and permanently protected at a ratio of 2 acres protected for every 1 acre that would be lost. Compensation habitat will consist of existing off-site occupied habitat acquired in fee, through conservation easements, or from a certified conservation bank. The compensation habitat will be monitored to verify that habitat suitability is maintained. Monitoring will be conducted for 5 years or for a period of time to be determined in coordination with CDFW. An operations and management plan will be prepared and implemented for each compensation habitat, with funding provided through an endowment, to monitor the habitat and determine and implement appropriate management measures to maintain the habitat. Annual monitoring reports will be submitted to CDFW for review and a determination that the chosen Action Alternative remains in compliance with the mitigation.
26	BIO-TERR-2: Compensate for Effects on Riparian Habitat or Other Sensitive Natural Communities Riparian habitat will be created or acquired and permanently protected to compensate for adverse effects and ensure no net loss of riparian habitat functions and values. Land that could be acquired could include acreage upstream of the reservoir or elsewhere that satisfies appropriate compensation ratios. Compensation ratios will be based on site-specific information and determined through coordination with state and federal agencies (e.g., CDFW, USFWS, USACE, State Water Resources Control Board [SWRCB]). The compensation will be at a minimum ratio of 1:1 (1 acre restored or created for every 1 acre filled) and may be a combination of off-site restoration/creation and mitigation credits. A restoration and monitoring plan will be developed and implemented concurrently with construction. The plan will describe how riparian habitat will be created and monitored, including information regarding funding mechanisms and the appropriate long-term management measures, and agency reporting requirements.
27	BIO-TERR-3: Compensate for Adverse Effects on State or Federally Protected Wetlands Suitable wetland habitat (which provides habitat for northwestern pond turtle) will be created or acquired and permanently protected to compensate for adverse effects and ensure no net loss of wetland habitat functions and values. Compensation ratios will be based on site-specific information and determined through coordination with state and federal agencies (e.g., CDFW, USFWS, USACE, SWRCB). The compensation will be at a minimum ratio of 1:1 (1 acre restored or created for every 1 acre filled) and may be a combination of off-site restoration/creation and mitigation credits. A restoration and monitoring plan will be developed and implemented. The plan will describe how wetland habitat will be created and monitored, including information regarding funding mechanisms and the appropriate long-term management measures, and agency reporting requirements.

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28	BIO-TERR-4a: Implement Wildlife Crossings Wildlife crossings and directional wildlife fencing will be incorporated into the new roadway. Crossings will be composed of bridges and oversized culverts where possible. At all cut/fill locations, wildlife crossings will be considered; pre-engineered, prefabricated structures will be considered in lieu of fill. Crossings will maximize structure height as much as possible to maximize openness and structure function for a wide range of species, including larger ungulates and species that prefer large crossings. Larger structures will be a minimum of 15 feet in height. Wildlife crossings and fencing designs will use the most up-to-date road ecology and wildlife crossing manuals and handbooks.
29	BIO-TERR-4b: Wildlife Corridor Preservation and Enhancement Wildlife connectivity and habitat between the Project site and I-5 will be conserved to the maximum extent possible in order to preserve a wide swath of habitat between I-5 and the Project site. The conserved land will be as wide as possible and will incorporate habitat heterogeneity in order to facilitate movement for a broad range of species.
30	BIO-TERR-4c: Roadway Wildlife Crossing Signage Non-standard wildlife crossing warning signs will be installed to alert drivers and educate them to maintain the speed limit and stay alert for wildlife crossing the roadway. The signs will engage drivers by providing explicit instructions. Flashing lights may also be used to draw drivers' attention to the signs.
31	BIO-TERR-5: Develop a Management Plan for the Protection and Enhancement of Oak Woodlands Per Policy 4, 4.1, of the Stanislaus County General Plan, the Project Sponsors will develop and implement a management plan for the protection and enhancement of oak woodlands to offset the loss of oak woodlands from the chosen Action Alternative. This plan will include measures for the protection, management, and enhancement of oak woodlands on lands that are acquired for the development of the reservoir but that are above the high-water line for the reservoir. A minimum of 1 acre of oak woodland will be preserved, managed, and monitored for every acre of oak woodland lost as a result of implementation of the chosen Action Alternative.
32	BIO-TERR-6: Implement Bird and Raptor-Safe Design and Construction of Transmission Lines To reduce impacts on avian species from transmission line relocation under the chosen Action Alternative, the Project Sponsors will work with electric utilities to ensure that the design and construction of transmission lines will be implemented following applicable guidance found in the Avian Power Line Interaction Committee (APLIC) <i>Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006</i> (Avian Power Line Interaction Committee 2006) and <i>Reducing Avian Collisions with Power Lines: State of the Art in 2012</i> (Avian Power Line Interaction Committee 2012), or with more current guidance if it becomes available.
33	BIO-FISH-1: Spawning Gravel Monitoring and Mitigation A spawning gravel mitigation and monitoring plan shall be developed and implemented by the Project Sponsors to address potential impacts on white sturgeon spawning habitat in the San Joaquin River. The goal of the plan will be to ensure no long-term deficits in the supply of gravel from Del Puerto Creek to the San Joaquin River. The plan shall include pre- and post-project measurements of bedload transport rates, channel morphology, and bed composition in lower Del Puerto Creek and an implementation plan for augmenting gravel in this reach if monitoring detects a significant reduction in gravel loads to the San Joaquin River. The purpose of pre-project monitoring would be to define baseline bedload transport rates and channel and bed characteristics prior to dam construction and operation. These measurements would serve as a reference point for evaluating changes in the sediment budget of lower Del Puerto Creek following dam construction. Existing modeling results of the sediment transport capacity of Del Puerto Creek near the proposed dam site and near its confluence with the San Joaquin River would be used to establish initial estimates of gravel transport loads associated with the proposed environmental flow releases (≥ 500 cubic feet per second [cfs]) (Woodard & Curran 2019). These estimates would be used in combination with pre- and post-Project measurements of sediment transport and channel and bed characteristics to evaluate changes in the supply of gravel to the San Joaquin River. A professional geomorphologist shall develop a detailed geomorphic monitoring and assessment plan that will be included as part of the mitigation and monitoring plan. Key components of the plan will include a statement of the goals and objectives, pre-project surveys to establish sediment transport and channel monitoring stations, and a detailed description of the sampling design and pre- and post-project monitoring and assessment methods. The number and location of monitoring

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	stations shall be sufficient to characterize pre- and post-project trends in gravel inputs, storage, and outputs in lower Del Puerto Creek as well as associated changes in channel form (e.g., cross sections) and size composition of the bed material. - The need for post-project gravel augmentation will be based on the detection of significant changes in gravel transport loads, channel form, and bed composition in lower Del Puerto Creek. Because the proposed environmental flow releases are expected to maintain the sediment transport capacity of the creek, any major deficits in the supply of gravel to the channel downstream of the dam would be expected to result in reductions in gravel transport loads and potential changes in channel and bed characteristics such as bed incision, bank widening, and bed coarsening. The following criteria are proposed as thresholds to determine substantial sediment deficits and the need for gravel augmentation: Post-project measurements of gravel transport loads during peak flow releases indicate that loads have been substantially reduced (> 10 percent) relative to pre-project levels, - A comparison of pre- and post-project channel characteristics (bed elevations, channel widths, and slopes) indicates a substantial change (> 10 percent) in channel morphology associated with a sediment deficit, and - A comparison of pre- and post-project bed composition measurements indicates a substantial reduction (> 10 percent) in the amount of gravel (2- to 64-millimeter diameter) available for transport in the active channel of lower Del Puerto Creek. Because the frequency of monitoring will be dictated by the frequency of major flow events and environmental releases, sediment and channel monitoring will be conducted over a sufficient period to encompass at least three major flow events (≥ 500 cfs) during the post-project monitoring period. Repeated measurements of sediment and channel characteristics over a number of years are necessary to detect major shifts in the sediment regime amid the variability in scour and fill dynamics that may occur over shorter time frames. Although it would be ideal to monitor an equal number of pre-project events, this will most likely not be possible because of the limited time frame before implementation of the chosen Action Alternative. In this case, the modeled or estimated sediment transport capacity of the creek and the characterization of pre-project channel and bed characteristics will serve as the primary reference conditions for the post-project evaluation. The spawning gravel mitigation and monitoring plan shall also include a description of the spawning gravel augmentation program that would be implemented if monitoring detects a significant reduction in the supply of gravel to the San Joaquin River. The plan will include a list of potential gravel sources (borrow or spoil sites),¹ a description of the methods for determining the locations of gravel placement sites, a description of the monitoring methods that will be used to ensure the effectiveness of mitigation, and a description of the implementation schedule, agency coordination requirements, funding commitments, reporting, and regulatory/permitting requirements of the program.
34	CULT-1: Treatment Plan for Site P-50-0344 Prior to construction, a Historic Properties Treatment Plan shall be implemented for site P-50-0344. The treatment plan will be developed under a Memorandum of Agreement in consultation with appropriate consulting parties, which will establish the procedures and documentation needed to carry out data recovery for the resource. The treatment plan will include the field methods required for data recovery excavations as well as requirements and procedures for recordation, analysis, curation, reporting, and any other documentation or methods used for adequately mitigating adverse effects on the site. Collectively, the treatment plan shall characterize the nature of the assemblage and data potential at the site as well as synthesize and capture data that may be lost due to the construction and operational impacts of the chosen Action Alternative.
35	CULT-2: Avoidance Measures for Feature at Site P-50-0374. Avoidance measures shall be implemented during construction of the reservoir for an additional cultural resource identified during Native American consultation as having religious and cultural significance: site P-50-0374. Prior to any ground-disturbing activity, a 100-foot avoidance area will be established around the feature and no grading for borrow material or ground disturbing activities shall occur within this designated area. Protective fencing will be installed

¹ Existing sites include the spoil site that is currently used for ongoing channel maintenance activities in Del Puerto Creek (DWR 2015).

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	around the feature, delineating the area of avoidance.
36	CULT-3: Implement Measures to Protect Previously Unidentified Cultural Resources Construction will stop if potential cultural resources are encountered. If signs of an archaeological site, such as any unusual or large amount of bone, stone, shell, lumber, ceramics, cans, bottles, or any other prehistoric (Native American) or historic cultural resources are uncovered during grading or other construction activities, work will be halted within 100 feet of the find and the Del Puerto Water District and San Joaquin River Exchange Contractors Water Authority (Exchange Contractors) will be notified. A qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology shall be retained to evaluate the significance of the find and shall have the authority to modify the temporary 100-foot no-work radius as appropriate, using professional judgment. A qualified archaeologist will be consulted for an on-site evaluation. If the site is or appears to be eligible for listing in the CRHR or NRHP, additional mitigation, further testing for evaluation, and/or data recovery may be necessary. In the event that historic properties are identified and deemed eligible for listing on the NRHP, reasonable efforts to avoid, minimize, or mitigate adverse effects to such properties shall be implemented pursuant to 36 CFR Part 800.13(b). If the qualified archaeologist determines that the find does not represent a cultural resource, then work may resume immediately, and no further agency coordination is required. During operations, a qualified archaeologist will conduct a pedestrian survey of the reservoir shore (i.e., the primary area where the water level fluctuates) during periodic maintenance periods at the reservoir or facilities (once every 5 years). The pedestrian survey will determine if unknown buried archaeological resources have been exposed during water-level fluctuations. If cultural resources are found, the archaeologist will determine whether the resource is or appears to be eligible for listing in the CRHR and significant pursuant to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, Section 15064.5, and Public Resources Code (PRC) Section 21083.2. If the resources are determined to be eligible and significant, the archaeologist will recover the resource(s) pursuant to standard data recovery practices prior to refilling of the reservoir..
37	CULT-4: Implement Measures if Construction Activities Inadvertently Discover or Disturb Human Remains If human remains, including disarticulated or cremated remains, are discovered during any stage of construction, the construction contractor will immediately cease all ground-disturbing activities within 100 feet of the remains and notify the Del Puerto Water District and the Stanislaus County Coroner. In accordance with California Health and Safety Code Section 7050.5, no further disturbance will occur until the following steps have been completed: The Stanislaus County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined by the coroner to be Native American, the coroner has notified the NAHC within 24 hours. A professional archaeologist with Native American burial experience has conducted a field investigation of the specific site and consulted with the most likely descendant, if any, identified by the NAHC. As necessary and appropriate, the professional archaeologist may provide technical assistance to the most likely descendant, including assistance regarding excavation and removal of the remains. Under the Native American Graves Protection and Repatriation Act (NAGPRA) (25 USC 3001) and implementing regulations 43 CFR Part 10, Reclamation is responsible for the protection of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony that are discovered on Reclamation lands. All human remains and potential human remains must be treated with respect and dignity at all times. In the event that suspected human remains are discovered during construction activities on Reclamation land, all activities in the immediate area will cease, and appropriate precautions will be taken to protect the remains and any associated cultural items from further disturbance. Reclamation will follow the procedures outlined in 43 CFR Part 10.4, Inadvertent Discoveries. The Reclamation Region 10 Regional Environmental Officer will be immediately notified by telephone and will take responsibility for the discovery by contacting the appropriate law enforcement and Reclamation officials. Within three (3) working days of confirmation of the discovery (see 43 CFR Part 10.4[d][1][iii]), the Regional Cultural Resource Officer will ensure that Indian tribes likely to be affiliated with the discovered human remains (e.g., lineal descendant, culturally affiliated Indian tribe, Indian tribe with other cultural relationship, and Indian tribe that aboriginally occupied area) are notified by telephone or in person, with written confirmation. Treatment and handling of the remains will be determined through consultation between Reclamation and consulting tribes.

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38	GEO-1: Perform Design-Level Geotechnical Evaluations for Seismic Hazards During the design phase for the proposed Action, the Project Sponsors shall prepare a design level Geotechnical Investigation and Report. The Geotechnical Investigation and Report shall further investigate and evaluate subsurface conditions, potential geohazards, and provide further Project specific information for development of excavation and construction plans and procedures. The geotechnical evaluations shall include appropriate site-specific geotechnical investigations including those focused on the geologic units and soils of the Project site that could become unstable as a result of the Project and shall be based on the site conditions, location, and professional opinion of the geotechnical engineer. Investigations may include subsurface drilling, soil testing, and analysis of site seismic response to determine appropriate and feasible measures to be incorporated into the Project design. A geotechnical interpretive report shall be prepared to detail the findings of the evaluations. The performance standard to be used in the geotechnical evaluations will be minimization of the hazards associated with seismic ground shaking, landslides, and subsidence. If the results of the geotechnical investigations indicate the presence of hazards, appropriate support and protection measures shall be designed and implemented. Potential landslide EPMs that could be considered include avoidance of the feature, or reduction of vulnerability to the Project through engineering design. Engineered mitigation options may include subdrains, dewatering, and/or systems to prevent surface water infiltration, and/or design of appropriate stabilization approaches to reduce driving forces and/or increase resisting forces, including retaining walls and mechanically stabilized embankments. Monitoring of the hazardous features including performance of any mitigation option will be included as part of the long-term operation and maintenance of the proposed Project. Recommendations provided in the Geotechnical Investigation and Report shall be incorporated into the final construction plans and specifications and shall augment the design and construction requirements of the California Department of Water Resources Division of Safety of Dams (DSOD) dam safety guidelines. Design of the Project shall comply with all measures required by DSOD.
39	GEO-2: Prepare and implement a SWPPP and associated BMPs Before any ground-disturbing activities begin, the Project Sponsors shall prepare a Project Specific SWPPP that will be implemented as part of the Construction General Permitting Process. The contractor hired by the Project Sponsors to implement the SWPPP shall review and certify they will implement the BMPS identified on the SWPPP, including an erosion control plan, and measures to eliminate construction waste measures to ensure that waters of the United States and the state are protected. The SWPPP shall include site design measures to minimize off-site stormwater runoff that might otherwise affect surrounding habitats. The Central Valley Regional Water Quality Control Board will review and monitor the effectiveness of the SWPPP through mandatory reporting by the Project Sponsors and the construction contractor as required. The SWPPP shall be prepared with the following objectives: • Identify all pollutant sources, including sources of sediment, that may affect the quality of stormwater discharges from construction of the Project. • Identify BMPs that effectively reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the site during construction to the Best Available Technology/Best Control Technology standard. • Provide calculations and design details as well as BMP controls for site run-on that are complete and correct. • Identify Project discharge points and receiving waters. • Provide stabilization BMPs to reduce or eliminate pollutants following construction. The construction contractor shall implement the SWPPP, including all BMPs, and shall inspect all BMPs during construction. Potential SWPPP BMPs could include but would not be limited to the following: • Preserve existing vegetation where possible. • Roughen the surfaces of final grades to prevent erosion, decrease runoff, increase infiltration, and aid in vegetation establishment.

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	- Place riparian buffers or filter strips along the perimeter of the disturbed area to intercept pollutants before off-site discharge. - Place fiber rolls around on-site drain inlets to prevent sediment and construction related debris from entering inlets. - Place fiber rolls along down-gradient disturbed areas of the site to reduce runoff flow velocities and prevent sediment from leaving the site. - Place silt fences down-gradient of disturbed areas to slow down runoff and retain sediment. - Stabilize the construction entrance to reduce the tracking of mud and dirt onto public roads by construction vehicles. - Stage excavated and stored construction materials and soil stockpiles in stable areas and cover or stabilize materials to prevent erosion. Stabilize temporary construction entrances to limit transport/introduction of invasive species and control fugitive dust emissions.
40	GEO-3: Site-Specific Geotechnical Investigation for Soil Expansion The design-level geotechnical evaluation shall consider the potential for expansive soils and include measures that would ensure that structures are not damaged by expanding and contracting soils. Feasible measures would include removal and replacement of soil, deep foundations, or deep mixing of compressible or expansive soils with stabilizing agents. All measures included in the geotechnical evaluation shall be incorporated into Project design specifications.
41	GEO-4: Preparation and Implementation of a Paleontological Resources Monitoring and Protection Plan A Paleontological Resources, Monitoring, and Protection Plan (Paleontological Plan) shall be prepared for the proposed Project by a paleontologist or similar professional. The Paleontological Plan shall include BMPs to be followed by the contractor during construction of the proposed Project. The Paleontological Plan may include, but is not limited to: - Processes and requirements for the observation of grading and earth disturbing activities to watch for fossils or other paleontological resources including identification of those construction activities/components of the proposed Project that might require monitoring. - A process to follow if paleontological resources are discovered, including: - Stop all work and salvage unearthed fossil remains including simple excavation of exposed specimens or, if necessary, plaster-jacketing of large and/or fragile specimens, or richly fossiliferous deposits - Record stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including a detailed description of all paleontological localities within the Project site, as well as the lithology of fossil-bearing strata within the measured stratigraphic section, if feasible, and photographic documentation of the geologic setting - Prepare collected fossil remains for curation, to include cleaning the fossils by removing the enclosing rock material, stabilizing fragile specimens using glues and other hardeners, if necessary, and repairing broken specimens; - Curate, catalog and identify the fossil remains to the lowest taxon possible, inventory specimens, assign catalog numbers, and enter the appropriate specimen and locality data into a collection database; and Transfer the cataloged fossil remains to an accredited institution (museum or university) in California that maintains paleontological collections for archival storage and/or display. The transfer shall include copies of relevant field notes, maps, stratigraphic sections, and photographs. - Prepare a Paleontological Resources Mitigation Report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the fossils collected, and provide this report to the Project Sponsors, Stanislaus County, and appropriate paleontological programs/institutions near the proposed Project site such as the University of California (Berkeley) Museum of Paleontology or the Natural History Museum of Los Angeles County. - The Paleontological Plan shall be reviewed and implemented by Project Sponsors and the contractor.

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42	HAZ-1a: Hazardous Materials Management and Spill Control Plan Before construction begins, the Project Sponsors shall require all construction contractors to develop and implement a Hazardous Materials Management and Spill Control Plan (HMMSCP) that includes a Project-specific contingency plan for hazardous materials and waste operations, including management of contaminated soil. The HMMSCP shall be reviewed and approved by Project Sponsors and shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, as well as federal OSHA and Cal/OSHA regulations. Any substance defined by the California Accidental Release Program as extremely hazardous would also require preparation of a Risk Management Plan. Elements of the HMMSCP shall include, but not be limited to the following: • A discussion of hazardous materials management, including delineation of hazardous material storage areas, access and egress routes, waterways, emergency assembly areas, and temporary hazardous waste storage areas; • Notification and documentation of procedures; and • Spill control and countermeasures, including employee spill prevention/response training.
43	HAZ-1b: Preparation of Hazardous Materials Business Plan If Project operations involve the use, handling or storage of hazardous materials in excess of threshold quantities, prior to operation of the new facilities, Project Sponsors shall prepare and implement a Hazardous Materials Business Plan (HMBP) for the proposed Project. The plan shall be prepared in accordance with the Hazardous Materials Business Plan Program (California Health and Safety Code, Section 25500, et seq., and the related regulations in CCR Title 19 Section 2620, et seq.), and shall be filed with the California Environmental Reporting System. The HMBP shall include a hazardous materials inventory, site plan, an emergency response plan, and requirements for employee training.
44	HAZ-1c: Implement Avoidance and Minimization Measures for Impacts Related to the Abandoned Oil Wells. During the Project design phase, Project Sponsors shall verify exact locations of all wells where Project construction would disturb the soil above the well location and shall mark the locations of wells for future reference. Special attention shall be paid to Wells 3 and 6, which are potentially located in the footprint of the reservoir inundation area and roadway realignment, respectively. For any well that is outside the Project footprint but within 100 feet of the proposed construction area, Project Sponsors shall impose a 10-foot, no-build buffer zone around the well. If any wells are within the area that would be affected by construction or operation of the Project. Project Sponsors shall determine if avoidance is feasible, and if the avoidance is not possible, Measure HAZ-1d shall be implemented.
45	HAZ-1d: Management of Abandoned Oil Wells For any wells determined to be within the proposed footprint of Project facilities, Project Sponsors shall work with the Geologic Energy Management Division (CalGEM) to ensure that any abandoned well within the inundation area of the Del Puerto Canyon Reservoir is abandoned to current standards. CalGEM will conduct a lease and site inspection for the well. If the well is determined to be hazardous it shall be re-abandoned to current standards. If any unknown wells are discovered during Project construction CalGEM shall be notified immediately. Work on abandoned wells shall be permitted and approved by CalGEM, including any modifications, re-abandonment, or mitigation of leaking fluids or gas. Project Sponsors shall communicate pertinent information from CalGEM to the appropriate county recorder for inclusion in the title information of the subject real property. Physical access to any abandoned well shall be maintained in the event re-abandonment becomes necessary in the future. Rig access shall be maintained to allow a well servicing rig and associated necessary equipment to reach the well without disturbing the surrounding infrastructure. Requirements for physical access shall be considered during design and shall be coordinated with CalGEM.
46	HAZ-1e: Soil Sampling and Disposal Prior to acquiring property or obtaining easements for construction of Project facilities, Project Sponsors shall complete a Phase I Environmental Site Assessment for soil and groundwater contamination and potential hazardous materials in structures. The recommendations set forth in the Phase I assessment shall be implemented to the satisfaction of

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	applicable agencies before construction begins. If Phase I assessments indicate the potential for contamination, a Phase II Environmental Site Assessment shall be completed before construction begins. The Phase II assessment may include building material, soil and/or groundwater sampling and analysis for any anticipated contaminants. If the Phase I assessment identifies potential presence of contamination from agricultural activities, the Phase II Assessment would include evaluation of abandoned orchards to test for the presence of organochlorine pesticides (OCPs) in accordance with DTSC's Interim Guidance for Sampling Agricultural Properties. The Phase II sampling is intended to identify how to dispose of any potentially harmful material from excavations, and to determine if construction workers need specialized personal protective equipment while constructing the pipeline through that area. Contaminated soil will not be reused for backfill following excavation. If soil or groundwater contaminated by potentially hazardous materials is exposed or encountered during construction that was not identified in the Phase I assessment, the appropriate hazardous materials agencies shall be notified. If contaminated soils must be excavated and removed from the site, the removal of contaminated soil would be subject to the measures described under Measure HAZ-1a .
47	HYD-1a: Comply with General Order for Dewatering or Other Appropriate NPDES Permit To minimize the impacts to water quality from dewatering activities, the Project Sponsors shall implement measures contained in the General Order for Dewatering or other appropriate NPDES permit or Waste Discharge Requirement.
48	HYD-1b: Comply with Reclamation Monitoring Plan for Non-Project Water Pump-in To minimize impacts to water quality for downstream users of the CVP, the Project Sponsors shall develop and implement a monitoring plan based on the Delta Mendota Canal Non-Project Water Pump-in Program Monitoring Plan (USBR 2018) to ensure compliance with Reclamation water quality standards. The monitoring plan will include sampling and testing of water quality prior to water entering the DMC. Contingency plans shall be implemented if water quality does not meet Reclamation standards.
49	HYD-2: Develop Operational Requirements to Deliver Recharge Water to Lower Del Puerto Creek The Project Sponsors shall develop an operations manual (seeal Appendix J) that describes water delivery to the lower reach of Del Puerto Creek below the proposed dam to make up for lost natural seepage due to the proposed Project. The manual shall provide releases, for the City of Patterson's benefit depending on water year type and Del Puerto Creek inflows, of up to 1,700 AFY. Such releases will maintain existing/no-project in-stream recharge conditions.
50	LU-1: Minimize Transmission Structures in Highway Service Commercial Areas The relocated transmission towers shall be sited to avoid areas zoned for highway service commercial use.
51	TR-1a: I-5 Sperry Avenue Interchange Improvements Project Contributions The Project Sponsors shall work with Stanislaus County and the City of Patterson to contribute a fair share toward the planned I-5 Sperry Avenue Interchange Improvements project. The signal at the I-5 Southbound Ramps intersection is needed to mitigate the Project impact. The signal at the I-5 Northbound Ramps intersection is recommended to provide efficient operations at both intersections, which are closely spaced and which would not function acceptably with signal control at one intersection and side-street stop-control at the other. The proportional share calculation should take into account the existing deficiency at the Southbound Ramps intersection and the non-Project traffic volume growth between the existing conditions and near-term conditions without the Project, as well as the County and City's plans to secure other state and federal funding for the Interchange Improvements project. Alternatively, the Project Sponsors may pay a traffic mitigation fee per peak hour trip or another negotiated contribution. Because the planned Interchange Improvements Project is not expected to be fully funded and complete until after the proposed Project's construction period, Stanislaus County and the City of Patterson may choose to use the funding contribution, along with other funding sources if available, to erect temporary traffic signals during dam and roadway realignment construction. In addition to contributing funding for a traffic signal at the I-5/Sperry Avenue Interchange, the Project Sponsors shall explore development of alternative construction access to the dam site. It may be possible to direct a portion of the construction traffic along Zacharias Road. Although the public road ends at the DMC, there are bridges across the DMC and California Aqueduct and an undercrossing of Interstate 5, which could provide access to the dam site upon

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	receiving permission.
52	TR-1b: I-5 Ingram Creek Road Interchange Improvements Project Contributions The Project Sponsors shall work with Stanislaus County to contribute a fair share toward signal control improvements at the Ingram Creek Road/I-5 Southbound Ramps and Ingram Creek Road/I-5 Northbound Ramps intersections. The proportional share calculation should account for existing deficiencies at the southbound ramp intersection. For the northbound ramp intersection, since the Alternative's impacts are temporary and do not meet the signal warrant, traffic levels should be monitored, and temporary traffic signals may be installed during construction if necessary
53	TR-2: Implementation of Construction Traffic Management Plan The Project Sponsors shall prepare a detailed Construction Traffic Management Plan to address traffic conditions throughout the construction period. As part of the plan development, the Project Sponsors and their construction contractors shall meet with appropriate Stanislaus County, City of Patterson, and Caltrans departments to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and safety effects during construction of the proposed Project. The Project Sponsors shall develop the plans for review and approval by the appropriate City, County and Caltrans departments. The plans shall include at least the following items and requirements: A. A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. B. Location of construction staging areas for materials, equipment, and vehicles at approved locations. C. A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an on-site complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem. D. Provision for accommodation of pedestrians and bicyclists in the construction area. E. Provision for parking management and spaces on the Project site for all construction workers to ensure that construction workers do not park on-street where insufficient shoulder space exists. F. A plan for restoration of pavement to pre-construction conditions after completion of all construction. Other items deemed necessary by the City, County and Caltrans during preparation of the Construction Traffic Management Plan.