

APPENDIX BR-1
BIOLOGICAL RESOURCES ASSESSMENT



Date: August 19, 2025

To: Matthew Gerken
Associate Vice President
AECOM
matthew.gerken@aecom.com

From: Becky Rozumowicz-Kodsuntie
Senior Biologist
Area West Environmental, Inc.
becky@areawest.net

SUBJECT: Biological Resources Assessment for the North Watt/North Highlands Specific Plan Area, Sacramento County, California

Mr. Gerken,

Area West Environmental, Inc. (AWE) has prepared this Biological Resources Assessment for the North Watt/North Highlands Specific Plan Area (SPA), located approximately 1,500 feet east of Interstate 80 in Sacramento, Sacramento County, California (Figure 1). This report includes a description of existing biological conditions; potential sensitive biological and aquatic resources that may trigger environmental regulatory permits; results of a windshield survey; and potential “red flag” issues that may present obstacles to future development within the SPA. The purpose of this report is to help inform future zoning and mitigation requirements for future development projects and infrastructure improvements required to support future development.

Proposed Project Description

The SPA is located along Watt Avenue from Interstate-80 on the south end to Antelope Road/U Street on the north end. The SPA consists of approximately 704 acres distributed along Watt Avenue located within the North Highlands community of unincorporated Sacramento County (Figure 1 and 2). The SPA is generally situated between the McClellan Business Park and an area informally called “West of Watt” to the west and single-family residential neighborhoods in the North Highlands community to the east.

The SPA is a comprehensive tool to guide the implementation of the community’s vision for a vibrant, economically healthy corridor that enhances the quality of life in North Watts/ North Highlands Corridor and the greater Sacramento region (Figure 3).

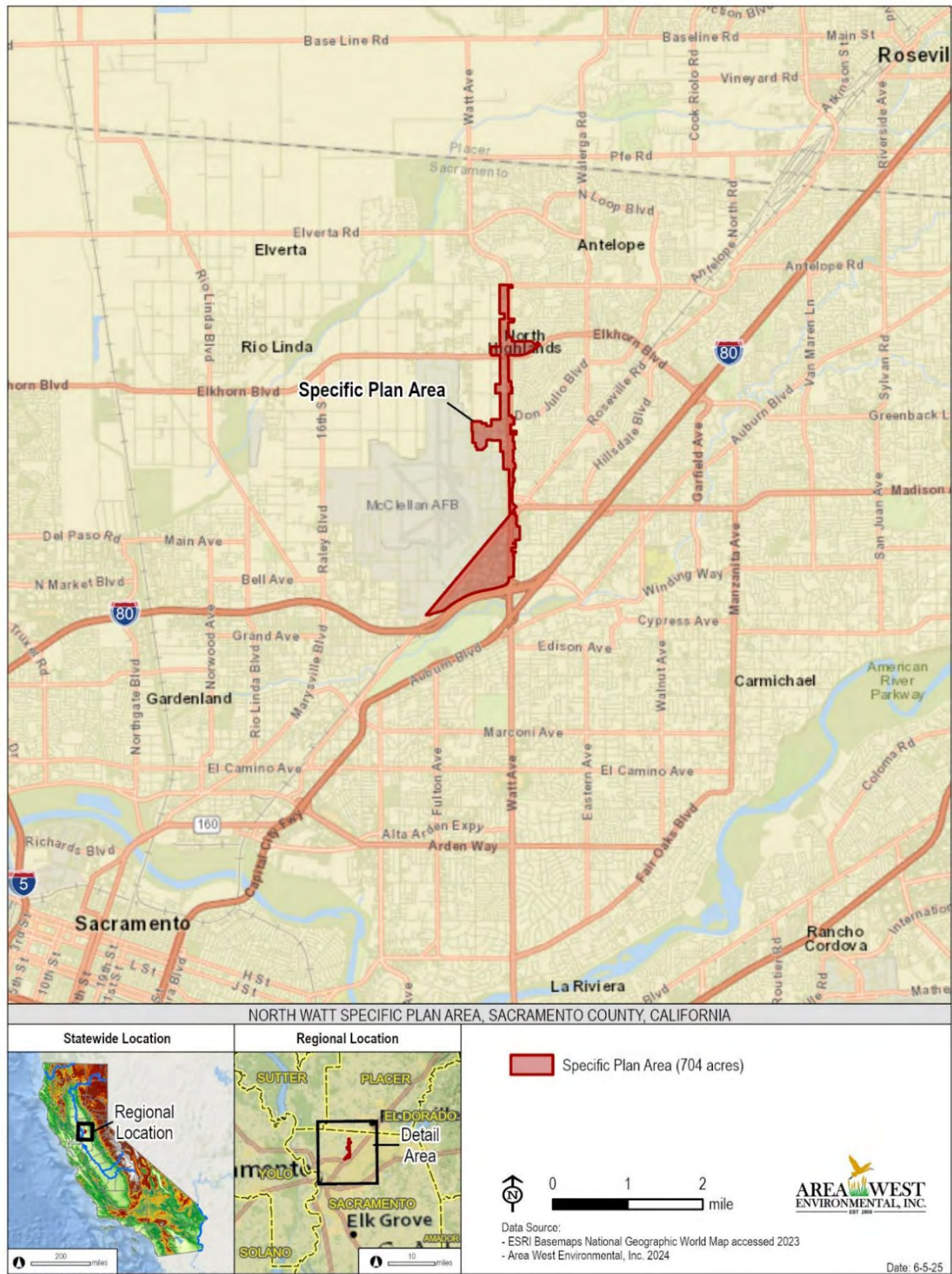


Figure 1. Specific Plan Area Vicinity

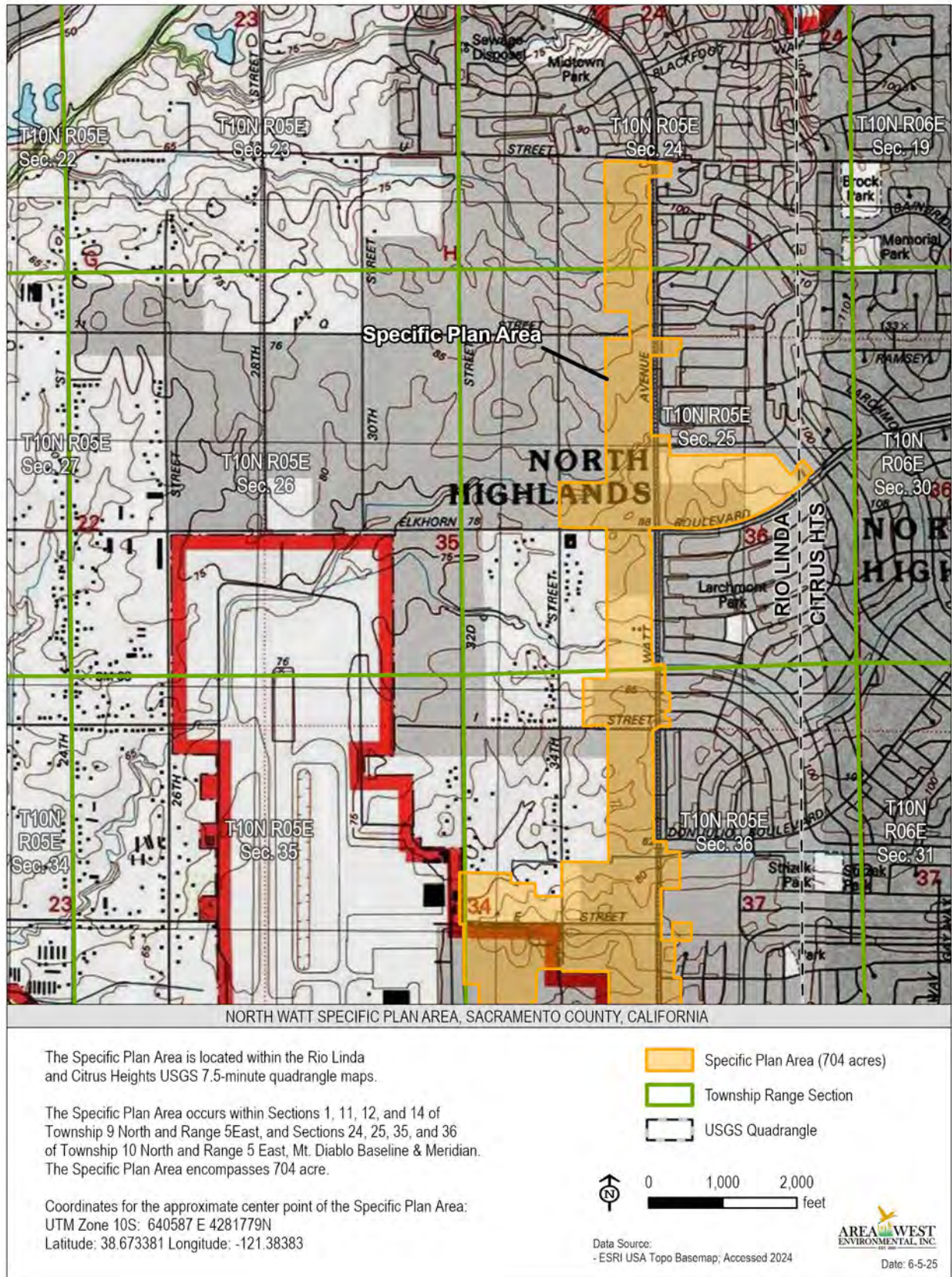


Figure 2a. Specific Location and Topography

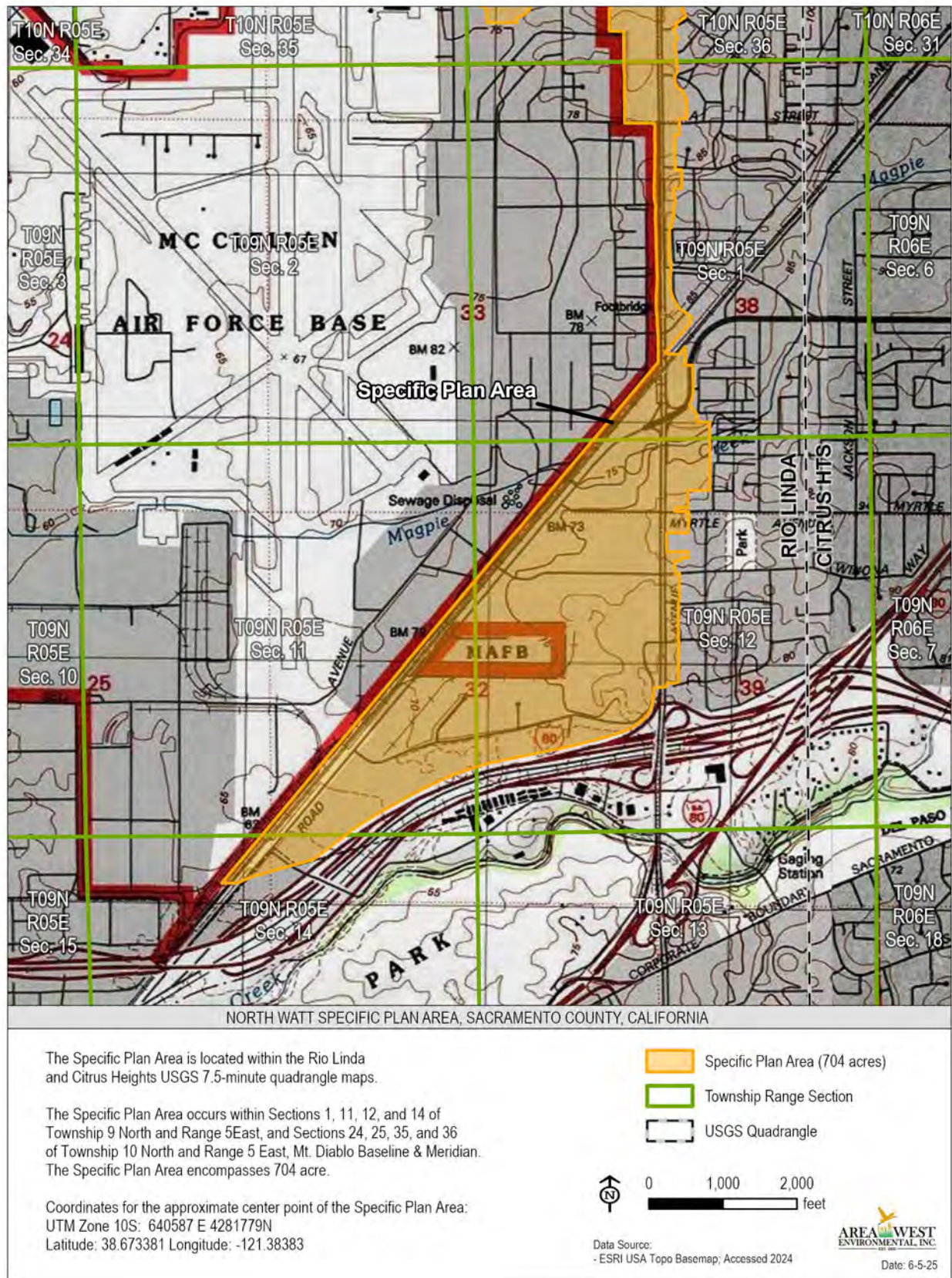


Figure 2b. Specific Plan Area Location and Topography

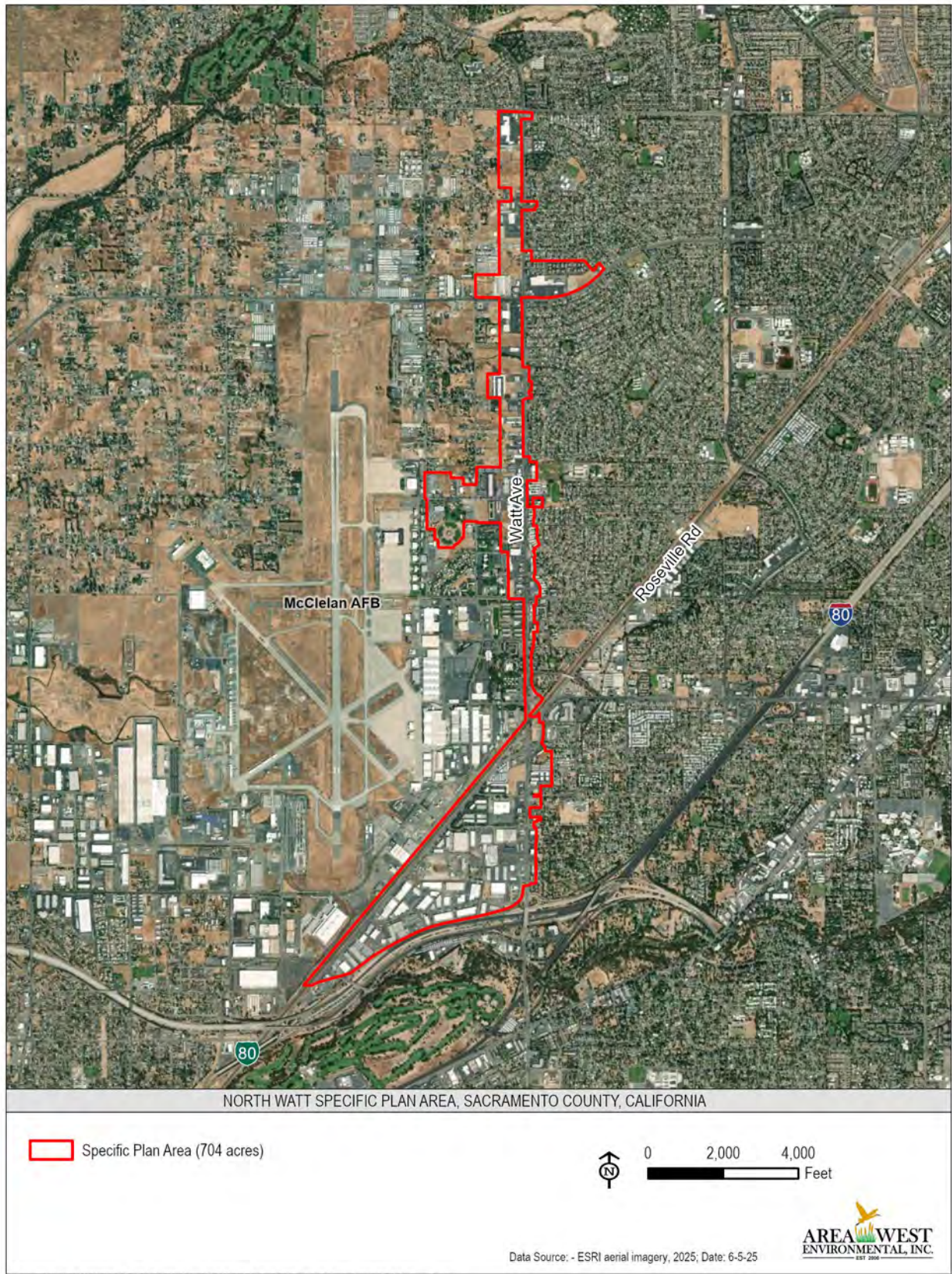


Figure 3. Specific Plan Area

Regulatory Setting

The following section details the federal, state, and local regulations relevant to the biological resources within SPA.

Clean Water Act Sections 401, 402, and 404

Section 404 of the Clean Water Act (CWA) protects waters of the U.S., including wetlands and drainages, by requiring projects that would discharge dredge or fill material into them to obtain a permit or authorization from the U.S. Army Corps of Engineers (USACE). The permitting program is designed to minimize the fill of waters of the U.S. and when impacts cannot be avoided, require compensatory mitigation.

Section 401 of the CWA requires any applicant for a federal license or permit that could result in any discharge into waters of the U.S. (i.e., USACE permit to fill wetlands), to obtain water quality certification from the Regional Water Quality Control Board (RWQCB).

Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system to prohibit the unauthorized discharge of any pollutant (except for dredged or fill material) into waters of the U.S. This permit program is administered by the State Water Resources Control Board (SWRCB). Sacramento County has obtained a Municipal Stormwater NPDES permit to reduced pollutants found in urban stormwater runoff to the maximum extent practicable. Sacramento County complies with this permit by developing and enforcing ordinances and requirements to reduce discharge of sediments and other pollutants in runoff. Projects must comply with the Sacramento County Land Grading and Erosion Control Ordinance.

In addition, construction sites disturbing one or more acres are required to comply with the State's General Stormwater Permit for Construction Activities. The Construction General Permit is issued by the SWRCB and enforced by the RWQCB. The Construction General Permit requires the preparation and implementation of a site-specific Storm Water Pollution Prevention Plan (SWPPP) that minimizes construction and storm water related impacts to waterways.

Porter -Cologne Water Quality Act

The Porter-Cologne Water Quality Act extends the RWQCB jurisdiction over waters of the State, which defines waters of the State as any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code Section 13050[e]). In the absence of CWA Section 404 jurisdiction over isolated waters or other waters of the State, California retains authority to regulate discharges of waste into waters of the State.

California Department of Fish and Game Code Sections 1600-1610

Under California Fish and Game Code (CFGF) Sections 1600–1610 California Department of Fish and Wildlife (CDFW) may enter into a Streambed Alteration Agreement (SAA) with an applicant if a project would divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake.

Migratory Bird Treaty Act and California Fish and Game Code Sections 3503.5, 3511, 3513, and 4150

The federal Migratory Bird Treaty Act (MBTA) (16 United State Code [USC], Sec. 703, 1989) prohibits killing, possessing, or trading migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, bird nests, and eggs. The MBTA is administered by the U.S. Fish and Wildlife Service (USFWS) and special permits from the agency are generally required for the take of any migratory birds. This act applies to all persons and agencies in the U.S., including federal agencies. Under CFGF, eggs and nests of all birds are protected from take under CFGF Section 3503. Raptors and raptor nests or eggs are protected from take under CFGF Section 3503.5. Migratory birds are expressly prohibited from taking under CFGF Section 3513 and species designated by CDFW as fully protected species are protected from take under CFGF Sections 3511, 4700, 5050, and 5515. Bats are protected from take under CFGF Section 4150.

State Endangered Species Act

The CDFW is the state agency responsible for the protection of endangered and threatened plants, fish, and wildlife and for the regulation of activities that could affect those species. The regulatory vehicle that protects sensitive species administered by this agency is the California Endangered Species Act (CESA).

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973, and subsequent amendments, provides regulations for the conservation of endangered and threatened species and the ecosystems on which they depend. The USFWS (with jurisdiction over plants, wildlife, and resident fish) oversee the FESA.

Section 9 of the FESA prohibits the take of any fish or wildlife species listed as endangered, including the destruction of habitat that prevents the species' recovery. "Take" is defined as any action or attempt to hunt, harm, harass, pursue, shoot, wound, capture, kill, trap, or collect a species. Section 9 prohibits the unlawful removal and possession, or malicious damage or destruction, of any endangered plant from federal land. Section 9 prohibits acts to remove, cut, dig up, damage, or destroy an endangered plant species in nonfederal areas in knowing violation of

any state law or in the course of criminal trespass. Candidate species and species that are proposed for or under petition for listing receive no protection under Section 9.

Sacramento County General Plan Policies

Sacramento County's 2030 General Plan serves as a guide for growth and development within the unincorporated county to 2030. The strategies of the plan focus on economic growth and environmental sustainability, addressing the issues and needs of existing communities while accommodating growth based on smart growth principles (Sacramento County 2011). The Conservation Element of the General Plan provides goals and policies to maintain and preserve Sacramento County's natural environment and resources. Biological policies applicable to the SPA are provided below:

- **CO-24:** Comply with the Sacramento Areawide National Pollutant Discharge Elimination System Municipal Stormwater Permit (NPDES Municipal Permit) or subsequent permits, issued by the Central Valley Regional Water Quality Control Board (Regional Board) to Sacramento County, and the Cities of Sacramento, Elk Grove, Citrus Heights, Folsom, Rancho Cordova, and Galt (collectively known as the Sacramento Stormwater Quality Partnership [SSQP]).
- **CO-58:** Ensure no net loss of wetlands, riparian woodlands, and oak woodlands.
- **CO-59:** Ensure mitigation occurs for any loss of or modification to the following types of acreage and habitat function:
 - vernal pools,
 - wetlands,
 - riparian,
 - native vegetative habitat, and
 - special status species habitat.
- **CO-78:** Plans for urban development and flood control shall incorporate habitat corridors linking habitat sites for special status species.
- **CO-92:** Enhance and protect shaded riverine aquatic habitat along rivers and streams.
- **CO-94:** Development within the 100-year floodplain and designated floodway of Sacramento streams, sloughs, creeks or rivers shall be:
 - Consistent with policies to protect wetlands and riparian areas; and
 - Limited to land uses that can support seasonal inundation.
- **CO-107:** Maintain and protect natural function of channels in developed, newly developing, and rural areas.

- **CO-121:** No grading, clearing, tree cutting, debris disposal or any other despoiling action shall be allowed in rivers and streams except for normal channel maintenance, restoration activities, and road crossings.
- **CO-124:** Maintain and manage rivers and streams to encourage special status species.
- **CO-137:** Mitigate for the loss of native trees for road expansion and development consistent with General Plan policies and/or the Sacramento County Tree Preservation Ordinance.
- **CO-138:** Protect and preserve non-oak native trees along riparian areas if used by Swainson's Hawk, as well as landmark and native oak trees measuring a minimum of 6 inches in diameter or 10 inches aggregate for multi-trunk trees at 4.5 feet above ground.

Sacramento County Tree Preservation Ordinance

Sacramento County's Code of Ordinance Chapter 19.12.020 (Tree Preservation Ordinance) establishes basic standards and measures for the preservation and protection of trees within the county. Under the ordinance, protected trees are defined as:

- any living native oak tree having at least one trunk of six inches or more in diameter measured four and one-half feet above the ground, or a multi-trunked native oak tree having an aggregate diameter of ten inches or more, measured four and one-half feet above the ground (dbh).

The ordinance dictates that no person shall trench, grade or fill within the dripline of any tree or destroy, kill or remove any tree as defined, in the designated urban area of the unincorporated area of Sacramento County, on any property, public or private, without a tree permit, or unless authorized as a condition of a discretionary project approval by the Board of Supervisors, Sacramento County Planning Commission, Zoning Board of Appeals, the Zoning Administrator or the Subdivision Review Committee.

Methods

Desktop and Database Review

Prior to conducting field surveys, available information regarding biological resources with potential to occur within the vicinity of the Project site was gathered and reviewed, including information on special-status plant and wildlife species with potential to occur on the Project site. Several data sources were reviewed, including:

- general topography obtained from *Rio Linda* and *Citrus Heights* U.S. Geological Service (USGS) 7.5-minute topographic quadrangle map (Figure 2);

- a records search of the CDFW California Natural Diversity Database (CNDDB) for the *Rio Linda, Citrus Heights, Pleasant Grove, Roseville, Verona, Rocklin, Taylor Monument, Sacramento West, Sacramento East, Carmichael, Buffalo Creek, and Folsom* USGS quadrangles (CNDDB 2025) (Appendix A);
- a search of the California Native Plant Society (CNPS) Rare Plant Inventory for the *Rio Linda, Citrus Heights, Pleasant Grove, Roseville, Verona, Rocklin, Taylor Monument, Sacramento West, Sacramento East, Carmichael, Buffalo Creek, and Folsom* USGS quadrangles (CNPS 2025a) (Appendix A);
- a species list from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool for the Project site (USFWS 2025a) (Appendix A);
- a review of the USFWS Critical Habitat Mapper (USFWS 2025b);
- a review of the USFWS National Wetland Inventory Mapper (USFWS 2025c);
- a review of California Aquatic Resource Inventory (CARI) (San Francisco Estuary Institute [SFEI] 2025); and
- a review of Federal Emergency Management Agency (FEMA) (2025) floodplain maps.

A list of special-status plant and wildlife species known from the SPA was developed based on the review of existing information. This list was used to focus the site investigation on the special-status species and associated habitats with potential to be present at the SPA.

Field Survey

A windshield survey was conducted on August 6, 2025 by AWE biologists Mikhela Aiken and Claudia Kodsuntie. Appendix B provides representative photographs of the SPA taken during the surveys.

The windshield survey reviewed the SPA and accessible surroundings to examine the vacant and underutilized opportunity sites for potential special-status species, sensitive habitats, and on the ground conditions.

The specific methods employed for each of these elements are described below.

VEGETATION COMMUNITY

Vegetation community types were delineated using aerial photographs available in ESRI's online geographic information database. During the windshield survey, delineated habitats were checked and corrected when necessary by hand by drawing on a 1 inch = 1,000 feet aerial photograph of the SPA (Appendix C). All vegetation communities were noted, delineated, and assessed for special-status species suitability during the survey. Upland community types were based on observed dominant vegetation composition and density and classified using common biological nomenclature. Aquatic and developed habitat types were classified using common biological nomenclature and were delineated as described below.

SPECIAL-STATUS SPECIES SURVEYS AND ASSESSMENT

All special-status species that could potentially occur within the SPA were identified during the pre-field survey investigation. For the purpose of this report, special-status species are generally defined as follows:

- Plants that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA) Guidelines, Section 15380.
- Plants considered by the CNPS to be “rare, threatened, or endangered” in California (Lists 1B and 2B [CNPS 2025a]).
- Plants listed or proposed for listing by the State of California as threatened or endangered under CESA (14 California Code of Regulation [CCR] 670.5).
- Plants listed under the California Native Plant Protection Act (CFGF 1900 et seq.).
- Wildlife species that are listed or proposed for listing as threatened or endangered under the FESA).
- Wildlife species that are listed or proposed for listing under CESA (CFGF 1992 Sections 2050 et seq.; 14 CCR Sections 670.1 et seq.).
- Wildlife species that are designated as Species of Special Concern by CDFW.
- Wildlife species that are designated as Fully Protected by CDFW (CFGF, Sections 3511, 4700, 5050, and 5515).
- Wildlife species that meet the definition of rare or endangered under CEQA (14 CCR Section 15380).

Appendix A provides copies of species lists obtained from the USFWS, National Marine Fisheries Services (NMFS), CNDDB, and CNPS.

Results

Environmental Setting

The SPA follows Watt Avenue from Antelope Road on the north to US-80 on the south. The SPA is within a commercial and residential corridor with numerous expansive shopping centers and associated parking areas fronting the corridor and includes an industrial park in the southern portion of the SPA. Areas not occupied by business centers are instead residential housing areas or undeveloped, naturally vegetated lots. These undeveloped lots are uncommon within the SPA and often associated with aquatic features, such as Magpie Creek.

TOPOGRAPHY AND CLIMATE

The SPA is surrounded by residential development to the east and north, with industrial and commercial development to the west and south. The elevation within the SPA ranges from approximately 50 to 105 feet above mean sea level. Climate details within the vicinity of the SPA are based on historical data collected by the Western Regional Climate Center (WRCC) at the

Rocklin Station, California monitoring station (047516). The SPA has a Mediterranean climate, with temperatures ranging from an average high temperature in July of 96.5 degrees Fahrenheit (°F) to an average low of 34.9°F in December and January. In the vicinity of the SPA, the area receives an average of 22.8 inches of annual precipitation (rain), mostly from December through March and an average of 0.03 inches of annual snowfall, mostly in January (WRCC 2025).

Much of the SPA is highly urbanized, however portions of the SPA are semi-rural, vacant, or underutilized (Appendix C). West of the SPA, land is typically agricultural-residential and contains ample open space. Overall, most of the SPA includes areas that are vacant or semi-rural have been subjected to site modifications. The SPA does not contain pristine habitat, woodlands or agricultural lands. In urbanized areas, vegetation is sparse due to development and expansive paved parking areas, but when vegetation does occur, it consists of typical roadside and urban landscaping as well as native and non-native trees commonly found in developed areas. The vacant and semi-rural portions of the SPA are vegetated in non-native grasses and annual weeds. Some native and non-native trees occur throughout the vacant portions of the SPA. No critical habitat for threatened or listed species occurs within the SPA (USFWS 2025b) (Figure 4).

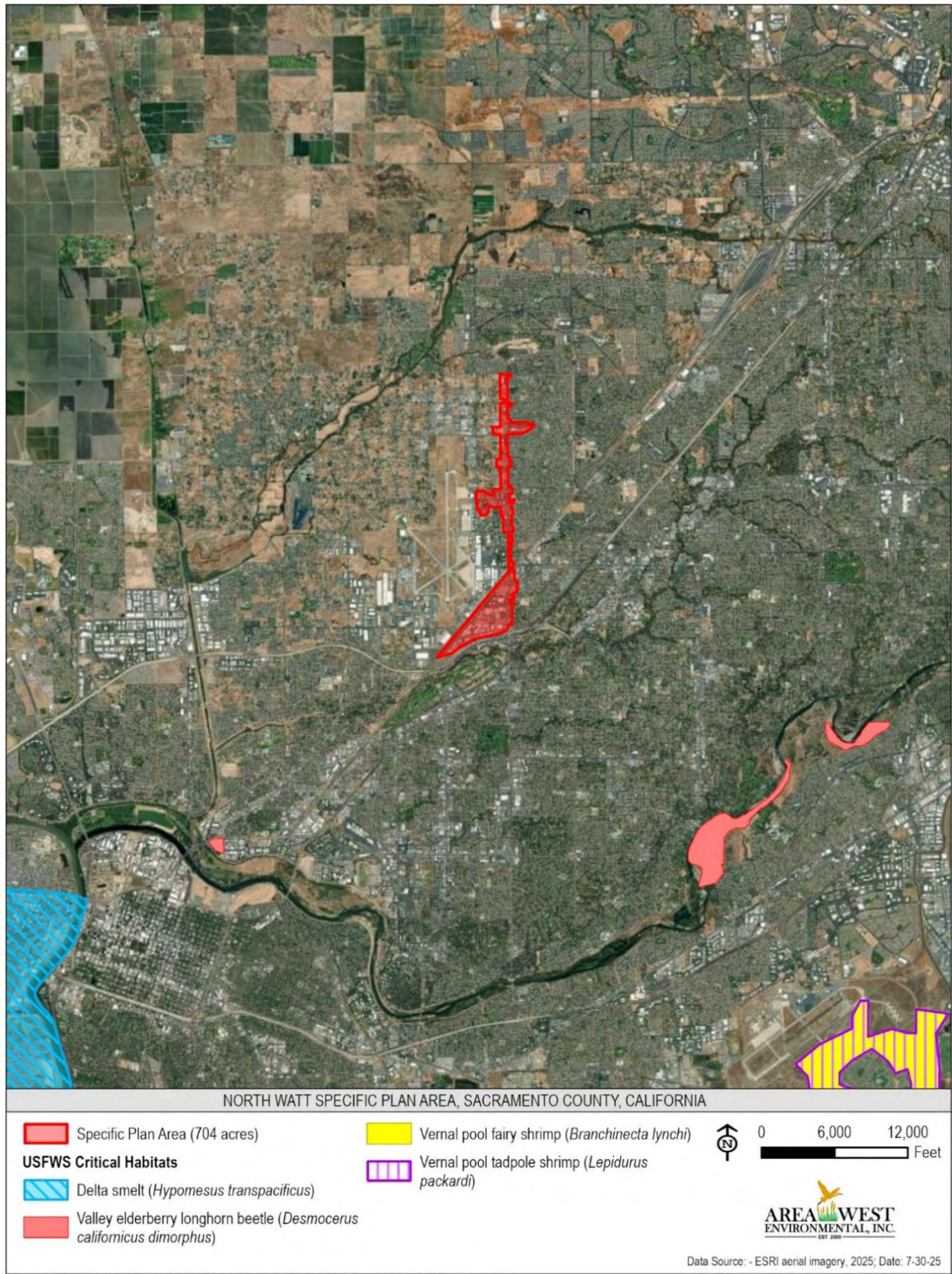


Figure 4. Critical Habitat

SOILS

According to the National Resources Conservation Service (NRCS) Web Soil Survey (2025) (Appendix C) there are 7 soil map unit within the SPA:

- Fiddymment fine sandy loam, 0 to 1 percent slopes (12 percent of SPA). The soil is alluvium derived from igneous and metamorphic rock over dense alluvium derived from igneous and metamorphic rock. The soil unit is well drained, with no frequency of flooding. This soil map unit is not listed as hydric soil.
- Fiddymment-urban land complex, 1 to 8 percent slopes (9.2 percent of SPA). alluvium derived from igneous and metamorphic rock over dense alluvium derived from igneous and metamorphic rock. The soil unit is well drained, with no frequency of flooding. This soil map unit is not listed as hydric soil.
- San Joaquin fine sandy loam, 0 to 3 percent slopes (3.4 percent of SPA). The soil is alluvium derived from granite and moderately well drained, with no frequency of flooding. This soil map unit is not listed as hydric soil.
- San Joaquin-urban land complex, 0 to 3 percent slopes (6.1 percent of SPA). The soil is alluvium derived from granite and moderately well drained, with no frequency of flooding. This soil map unit is not listed as hydric soil.
- Urban land (45.7 percent of SPA). This soil map unit is not listed as hydric soil.
- Urban land-xerarents-Fiddymment complex, 0 to 8 percent slopes (6.2 percent of SPA). The soil is alluvium derived from granite and well drained, with no frequency of flooding. This soil map unit is not listed as hydric soil.
- Xerarents-urban land- San Joaquin complex, 0 to 5 percent slopes (17.3 percent of SPA). The soil is alluvium derived from granite and well drained, with no frequency of flooding. This soil map unit is not listed as hydric soil.

FEMA FLOOD HAZARD

Review of the FEMA Flood Hazard Maps identified sections of the SPA are located within Special Flood Hazard Areas such as a regulatory floodway zone, 1 percent annual chance of flood zone, and 0.02 percent annual chance flood hazard zone (FEMA 2025) (Appendix C).

WATERCOURSES AND HYDROLOGY

The SPA is located within the USGS Hydrologic Unit Code (HUC) 12-digit Gibson Lake-Dry Creek (HUC 180201110105), Lower Steelhead Creek (HUC 180201110303), and Arcade Creek (HUC 180201110302) subwatersheds (USGS 2025a). According to the Sacramento County Department of Water Resources, water features present within the SPA consist of an unnamed branch to Dry Creek, two branches of Robla Creek, Magpie Creek, and a drainage canal (Sacramento County 2025a) (Appendix C). Potential wetlands, such as vernal pools, seasonal wetlands, and a stockpond also occur within the SPA.

The USFWS NWI map identified three riverine features and one freshwater emergent feature within the SPA (Appendix C). The southernmost riverine feature is Magpie Creek which runs through the SPA south of Roseville Road. Another riverine feature crosses the SPA north of Freedom Park Drive and south of Don Julio Boulevard. The northernmost riverine feature within the SPA consists of Robla Creek and Rio Linda Creek, located between Q Street and I Street. The NWI also identified freshwater emergent wetland west of Watt Avenue, south of U Street (USFWS 2025c). A review of CARI identified Magpie Creek and several unnamed fluvial streams and vernal pools within and adjacent to the SPA (SFEI 2025). USGS 3D Elevation Program (3DEP) identified the same major linear water features mentioned above, with additional smaller channel lines identified as well (USGS 2025b) (Appendix C).

Vegetation Communities

The windshield survey identified the following generalized land cover/vegetation communities and aquatic resources that are present within the SPA (Appendix C).

Annual Grassland. Annual grassland is the most common natural vegetation community within the SPA, representing undeveloped lots scattered between urbanized areas. Vegetation within this community was dominated by non-native annual grasses such as slender wild oat (*Avena barbata*) and soft brome (*Bromus hordeaceus*). Several of these areas have been recently tilled.

Annual Grassland/Vernal Pool Complex. Annual grassland/vernal pool complexes are present along the railroad tracks in the southern portion of the SPA. These areas are intermixed with annual grassland species and vernal pool endemic species, such as eryngium (*Eryngium* sp.).

Developed. Developed areas of the SPA are represented by roadways, buildings, and landscaped areas of non-native and ornamental plantings.

Disturbed. Disturbed areas of the SPA are frequently modified by human actions, often with a permeable gravel substrate, preventing vegetation from growing. These areas are present along the railroad tracks and within some undeveloped lots.

Intermittent Stream. A few intermittent streams were identified within the SPA, including Magpie Creek. These features are either concrete-lined or soil-bottomed and support aquatic plant species such as cattail (*Typha* sp.) and arrowhead (*Sagittaria* sp.).

Seasonal Wetland. A few potential seasonal wetlands were identified from aerial imagery of the SPA using signs of inundation (standing water, green vegetation during drier seasons of the year) visible over several years of imagery.

Stockpond. One stockpond is present within the SPA, supporting numerous wetland plant species that were unidentifiable during the windshield survey.

Acres of each land cover type within the SPA are provided in Table 1.

Table 1. Land Cover Types in the SPA

Land Cover Types	Acreage
Annual Grassland	103.30
Annual Grassland/Vernal Pool Complex	18.37
Developed	569.15
Disturbed	9.39
Intermittent Stream	2.68
Seasonal Wetland	0.49
Stockpond	0.69

Special-status Species

A preliminary review of USFWS, CNPS, NMFS, and CDFW's CNDDDB species lists identified 15 special-status plants and 29 special-status wildlife species with potential to occur within the vicinity of the SPA (Appendix A). Figure 5 depicts the special-status plants and wildlife occurrences from CNDDDB within 5 miles of the SPA. The special-status plant and wildlife with moderate to high potential to occur onsite are discussed below. All special-status species that could potentially occur within the SPA are included in Appendix D, Table D-1 and D-2, and include a rationale for the occurrence determination is included for each species.

Potential Environmental Regulatory Permits and Consultations

A majority of the SPA is developed, with few naturally vegetated, undeveloped areas scattered throughout. Although disturbed and adjacent to developed areas, traffic, and human disturbances, habitat within these undeveloped parcels have the potential to provide suitable habitat to several special-status species. Due to the presence of the environmental sensitive resources discussed in the previous sections, development in the SPA may trigger some or all of the following permits/approvals:

- Clean Water Act Section 404 permit from the Corps;
- Clean Water Act Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB);
- Coverage under Clean Water Act Section 402 National Pollution Discharge Elimination System Permit;
- Streambed Alteration Agreement (SAA) from CDFW;
- Sacramento County Tree Permit
- Federal Endangered Species Act Section 7 Consultation with USFWS;

NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

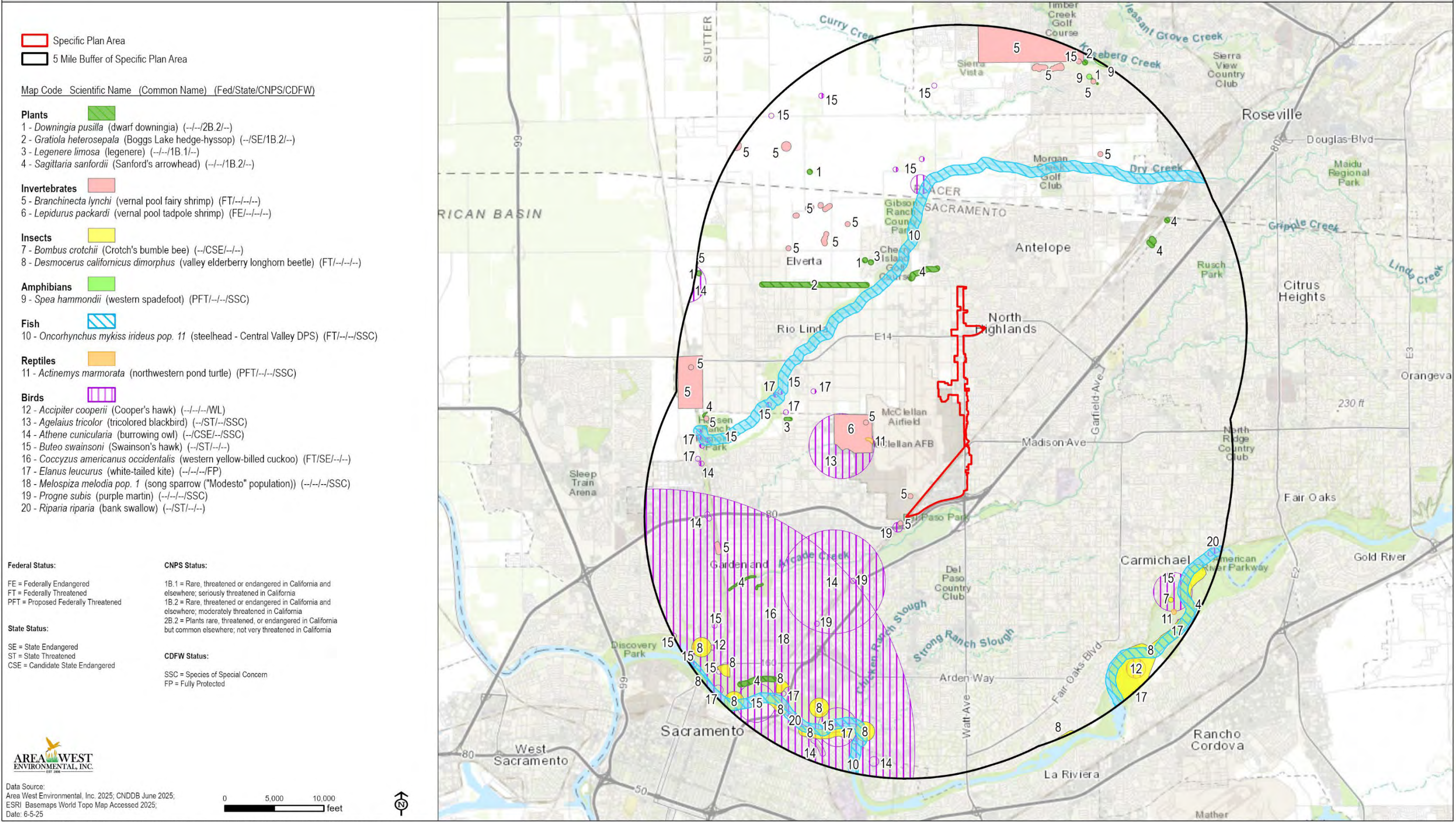


Figure 5 – CNDDB Occurrences within 5-miles of the SPA

Page Intentionally Blank

- California Endangered Species Act Incidental Take Permit or Consistency Determination from CDFW; and
- Migratory Bird Treaty Act and California Fish and Game Code Sections 3503.5, 3511, and 3513.

Potential Red-flag Issues

Future development projects within the SPA will need to consider regulatory implications of the location chosen and proposed construction methods. Construction may require excavation, trenching, tree removal, and other ground-disturbing activities (e.g., noise, dust) that could temporarily or permanently disturb sensitive species, habitats (including wetlands, waters of the U.S. and State), and cultural resources. The following details each of the potential red-flag issues identified that could affect future development implementation within the SPA along with potential environmental documentation necessary, and potential solutions.

Impacts to Wetlands, Waters of the U.S. or State

Future developments within the SPA may impact identified streams, potential wetlands, and other potential aquatic resources not visible during the windshield survey. Impacts to these aquatic resources may trigger the need for permits from the USACE, RWQCB, and CDFW.

The SPA falls within the USACE Sacramento Regulatory District. The type of permit issued by the USACE is dependent on the nature of the activity and the quantity of impacts to waters of the U.S. The USACE jurisdiction would be limited to the ordinary high water mark of the stream within the SPA and the extent of wetlands within the SPA. Permanent impacts to water of the U.S. may require compensatory mitigation at a minimum of a 1:1 ratio. Documentation to support a permit application package to the USACE would include an aquatic resources delineation report. The USACE must comply with Section 106 of the National Historic Preservation Act, as such, a cultural resources report may be required for projects impacting waters of the U.S. or State.

The SPA falls within the Central Valley RWQCB jurisdiction. A Water Quality Certification under Section 401 of the CWA is required for activities that disturb wetlands or waters of the State located in the SPA. The RWQCB generally requests compensatory mitigation for permanent impacts to wetlands or waters of the State. Documentation to support a permit application package to the RWQCB would include an aquatic resources delineation report.

The SPA falls within the CDFW North Central Region (Region 2) jurisdiction. A SAA may be required for impacts within the top of bank of waterways and associated riparian habitat. CDFW generally requests compensatory mitigation for permanent impacts within the top of bank and associated riparian area, as well as a 3:1 replacement of any trees with a diameter at breast height of 4 inches or greater that are removed. Documentation to support a permit application to CDFW would include an aquatic resources delineation report and a biological resources evaluation report.

Impacts to Riparian Habitat and Tree Removal

Although not observed during the windshield survey, riparian habitat is protected by CDFW. As mentioned above, should future development within the SPA impact riparian habitat, a CDFW SAA may be required. A comprehensive biological report that details the extent of CDFW jurisdictional riparian habitat and an aquatic resources delineation would supplement the permit application to CDFW.

Future developments within the SPA may require the removal of trees during construction activities. Per the Sacramento County Tree Preservation Ordinance, native oak trees, non-oak native trees, and landmark trees are protected to a degree through environmental review policy. Prior to performing activities that may impact or fully remove trees within the SPA, a Tree Permit may need to be acquired from the Sacramento County Planning and Environmental Review branch (Sacramento County 2025b).

Removal of riparian habitat and trees within the SPA may impact special-status species including but not limited to migratory birds and bats which is detailed below.

Impacts to Special-status Species

Although a majority of the SPA consists of developed habitat several special-status species listed under the FESA and CESA have the potential to occur within the SPA. Future development within the SPA may impact special-status species present within undeveloped parcels. Impacts to special-status species may require consultation with USFWS and CDFW along with potential permits and incorporation of project-specific avoidance and minimization measures to reduce potential impacts.

FEDERALLY-LISTED SPECIES

Consultation would be required with USFWS under Section 7 of the Federal Endangered Species Act (FESA) regarding potential impacts to FESA-listed species, including slender Orcutt grass (*Orcuttia tenuis*), Sacramento Orcutt grass (*Orcuttia viscida*), giant garter snake (*hamnophis gigas*), vernal pool fairy shrimp (*Branchinecta lynchi*), and vernal pool tadpole shrimp (*Lepidurus packardi*). This may be required if there are impacts on vernal pool or intermittent stream habitats, which occur within portions of the SPA. A Biological Assessment would be required to support consultation with USFWS and issuance of a USFWS Biological Opinion. As new species are listed under FESA, potential impacts to those species would also require USFWS consultation.

STATE-LISTED SPECIES

Consultation may be required with CDFW regarding potential impacts to CESA-listed species that may be present within the SPA including slender Orcutt grass, Sacramento Orcutt grass, Crotch's bumblebee (*Bombus crotchii*), giant garter snake, tricolored blackbird (*Agelaius tricolor*), burrowing owl (*Athene cunicularia*), and Swainson's hawk (*Buteo swainsoni*). A Section 2080.1

Consistency Determination (where CDFW finds the federal take authorization consistent with CESA and no further action is required) or Incidental Take Permit (Section 2081(b)) from CDFW would be required if a development project's biological documentation concludes that the project could result in take, as defined by CESA. Avoidance and minimization measures would likely avoid CESA take of the state-listed species. CESA consultation may be required if there are impacts on wetland, stream, riparian, and annual grassland habitat. If feasible, the development project's biological documentation would recommend avoidance and minimization measures (e.g., erect protective fencing around sensitive habitat within construction site, limit operating periods to avoid breeding season) to avoid the need for a Consistency Determination or Incidental Take Permit from CDFW.

MIGRATORY BIRDS AND RAPTORS AND ROOSTING BATS

The federal MBTA (16 United State Code [USC], Sec. 703, 1989) prohibits killing, possessing, or trading migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, bird nests, and eggs. Under CFGC, eggs and nests of all birds are protected from take under CFGC Section 3503. Raptors and raptor nests or eggs are protected from take under CFGC Section 3503.5. Migratory birds are expressly prohibited from take under CFGC Section 3513 and species designated by CDFW as fully protected species are protected from take under CFGC Sections 3511, 4700, 5050, and 5515. Bats are protected under CFGC Section 4150.

Future developments within the SPA may impact migratory birds and raptors protected by the MBTA and CFGC and roosting bats. Construction activities including tree removal during the bird breeding season (typically February 1 through August 31) and bat maternity season (typically May 1 through August 31) have the potential to impact species protected by the MBTA and CFGC. Measures to protect nesting birds or roosting bats include conducting preconstruction surveys and establishing a no disturbance zone around active bird nests and bat roosts during their respective nesting/mating season. If nesting birds or roosting bats are detected within or near the SPA, construction activities could be seasonally limited or delayed until young have fledged/left the roost. A biological resources evaluation report would include an evaluation of a project's potential to impact species protected by the MBTA and CFGC and may include avoidance and minimization measures to limit potential impacts from project construction.

TIME OF YEAR CONSTRAINTS FOR CONSTRUCTION

Due to the potential presence of sensitive biological resources, there may be timing windows where construction activities may be limited or cannot take place during portions of the year. These timing windows are likely to be associated with breeding season for special-status species and times when stream flows are lowest.

Active coordination with regulatory agencies such as USFWS and CDFW is recommended to confirm avoidance and minimization measures to reduce potential impacts and to identify

compensatory mitigation that may be required. For example, the agencies may agree to schedule modifications if a construction monitor is present during sensitive times for wildlife.

Conclusions

Future developments within the SPA have the potential to affect areas with sensitive resources (aquatic resources, special-status species, and cultural resources). AWE recommends early coordination with resource agencies to develop project design and construction methods that avoid and minimize potential impacts on these sensitive resources.

References

California Code of Regulations. Title 14 – Natural Resources, Division 1 – Fish and Game Commission – Department of Fish and Game, Subdivision 3 – General Regulations, Chapter 3 – Miscellaneous, Sections 607.5, 670.1. Available at: <https://www.law.cornell.edu/regulations/california/title-14/division-1/subdivision-3/chapter-3>. Accessed July 2025.

California Code of Regulations. Title 14 – Natural Resources, Division 6 – Resource Agency, Chapter 3 – Guidelines for Implementation of the California Environmental Quality Act, Article 20 – Definitions, Cal. Code Regs. Tit. 14, § 15380 – Endangered, Rare or Threatened Species. Available at: <https://www.law.cornell.edu/regulations/california/14-CCR-15380>. Accessed July 2025.

California Department of Fish and Wildlife. 2025. California Natural Diversity Data Base RareFind 5 and BIOS 6 Viewer. Available at: <https://apps.wildlife.ca.gov/bios6/?al=ds85>. Accessed July 2025.

California Fish and Game Code. Sections 1962, 1990, 2050, 3511, 4700, 5050, 5511. Available at: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=FGC&division=2.&title=&part=&chapter=&article=&nodetreepath=4. Accessed July 2025.

_____. Sections 3503. Available: https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=FGC&division=2.&title=&part=&chapter=&article=&nodetreepath=4. Accessed July 2025.

California Native Plant Society. 2025. Inventory of Rare and Endangered Plants (online edition, v9-01 1.0). Available at: <http://www.rareplants.cnps.org/>. Accessed July 2025.

CCR *see* California Code of Regulations.

CFGC *see* California Fish and Game Code.

CNPS *see* California Native Plant Society.

Federal Emergency Management Agency. 2025. Flood Maps – National Flood Hazard Layer Map. Available at: <https://www.fema.gov/flood-maps>. Accessed July 2025.

FEMA *see* Federal Emergency Management Agency.

NRCS *see* U.S. Department of Agriculture, Natural Resources Conservation Service.

Sacramento County. 2011. Sacramento County General Plan of 2005-2030. Amended November 9, 2011. Available at: <https://planning.saccounty.gov/PlansandProjectsIn-Progress/pages/generalplan.aspx>. Accessed July 2025.

_____. 2025a. Department of Water Resources Assets Open Waterways Map. Available at: <https://data-sacramentocounty.opendata.arcgis.com/maps/37cc6535316e43dbab8e1942ef1d7313/about>. Accessed July 2025.

_____. 2025b. Planning and Environmental Review. County Tree Preservation Ordinance. Available at: <https://planning.saccounty.gov/applicants/pages/projectsiteswithtrees.aspx>. Accessed August 2025.

San Francisco Estuary Institute. 2025. California Aquatic Resource Inventory. Available at: <https://www.sfei.org/projects/california-aquatic-resource-inventory-cari>. Accessed July 2025.

SFEI *see* San Francisco Estuary Institute.

U.S. Department of Agriculture, Natural Resources Conservation Service. 2025. Web Soil Survey. Available at: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed July 2025.

U.S. Fish and Wildlife Service. 2025a. IPaC: Information for Planning Consultation. Web application. Available at: <https://ipac.ecosphere.fws.gov/>. Accessed July 2025.

_____. 2025b. Critical Habitat Map. Available at: <https://www.fws.gov/project/critical-habitat>. Accessed July 2025.

_____. 2025c National Wetlands Inventory Wetlands Mapper. Available at: <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>. Accessed July 2024.

USFWS *see* U.S. Fish and Wildlife Service.

U.S. Geological Survey. 2025a. Watershed Boundary Dataset HUC 12s. Available at: <https://www.arcgis.com/home/item.html?id=b60aa1d756b245cf9db03a92254af878>. Accessed July 2025.

_____. 2025b. 3D Elevation Program. Available at: <https://www.usgs.gov/3d-elevation-program>. Accessed July 2025.

USGS *see* U.S. Geological Survey.

Western Regional Climate Center. 2025. Rocklin Station, California (047516), Period of Record Monthly Climate Summary. Available at: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7516>. Accessed July 2025.

WRCC *see* Western Regional Climate Center.

Appendix A. Species Searches



Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Rio Linda (3812164) OR Citrus Heights (3812163) OR Pleasant Grove (3812174) OR Roseville (3812173) OR Verona (3812175) OR Rocklin (3812172) OR Taylor Monument (3812165) OR Sacramento East (3812154) OR Sacramento West (3812155) OR Carmichael (3812153) OR Buffalo Creek (3812152) OR Folsom (3812162))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Acipenser medirostris pop. 1</i> green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	SSC
<i>Actinemys marmorata</i> northwestern pond turtle	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
<i>Alkali Meadow</i> Alkali Meadow	CTT45310CA	None	None	G3	S2.1	
<i>Alkali Seep</i> Alkali Seep	CTT45320CA	None	None	G3	S2.1	
<i>Ammodramus savannarum</i> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<i>Andrena subapasta</i> An andrenid bee	IIHYM35210	None	None	G1G2	S1S2	
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G4	S3	SSC
<i>Aquila chrysaetos</i> golden eagle	ABNKC22010	None	None	G5	S3	FP
<i>Archoplites interruptus</i> Sacramento perch	AFCQB07010	None	None	G1	S1	SSC
<i>Ardea alba</i> great egret	ABNGA04040	None	None	G5	S4	
<i>Ardea herodias</i> great blue heron	ABNGA04010	None	None	G5	S4	
<i>Astragalus tener var. ferrisiae</i> Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
<i>Bombus crotchii</i> Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
<i>Bombus pensylvanicus</i> American bumble bee	IIHYM24260	None	None	G3G4	S2	



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
<i>Branchinecta mesovallensis</i> midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
<i>Calycadenia spicata</i> spicate calycadenia	PDAST1P090	None	None	G3?	S3	1B.3
<i>Chloropyron molle ssp. hispidum</i> hispid salty bird's-beak	PDSCR0J0D1	None	None	G2T1	S1	1B.1
<i>Cicindela hirticollis abrupta</i> Sacramento Valley tiger beetle	IICOL02106	None	None	G5TH	SH	
<i>Clarkia biloba ssp. brandegeae</i> Brandegee's clarkia	PDONA05053	None	None	G4G5T4	S4	4.2
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T3	S3	
<i>Downingia pusilla</i> dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
<i>Dumontia oregonensis</i> hairy water flea	ICBRA23010	None	None	G1G3	S1	
<i>Egretta thula</i> snowy egret	ABNGA06030	None	None	G5	S4	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Elderberry Savanna</i> Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
<i>Falco columbarius</i> merlin	ABNKD06030	None	None	G5	S3S4	WL
<i>Fritillaria agrestis</i> stinkbells	PMLIL0V010	None	None	G3	S3	4.2
<i>Gonidea angulata</i> western ridged mussel	IMBIV19010	None	None	G3	S2	
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	G2	S2	1B.2
<i>Great Valley Cottonwood Riparian Forest</i> Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
<i>Hibiscus lasiocarpus var. occidentalis</i> woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	IICOL5V010	None	None	G2?	S2?	
<i>Juncus leiospermus</i> var. <i>ahartii</i> Ahart's dwarf rush	PMJUN011L1	None	None	G2T1	S1	1B.2
<i>Juncus leiospermus</i> var. <i>leiospermus</i> Red Bluff dwarf rush	PMJUN011L2	None	None	G2T2	S2	1B.1
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G4	S3S4	
<i>Lasiurus cinereus</i> hoary bat	AMACC05032	None	None	G3G4	S4	
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3T1	S2	FP
<i>Legenere limosa</i> legenere	PDCAM0C010	None	None	G2	S2	1B.1
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G3	S3	
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G2G3	S2S3	
<i>Melospiza melodia</i> pop. 1 song sparrow ("Modesto" population)	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
<i>Nannopterum auritum</i> double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
<i>Navarretia myersii</i> ssp. <i>myersii</i> pincushion navarretia	PDPLM0C0X1	None	None	G2T2	S2	1B.1
<i>Northern Claypan Vernal Pool</i> Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
<i>Northern Hardpan Vernal Pool</i> Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
<i>Northern Volcanic Mud Flow Vernal Pool</i> Northern Volcanic Mud Flow Vernal Pool	CTT44132CA	None	None	G1	S1.1	
<i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010	None	None	G5	S4	
<i>Oncorhynchus mykiss irideus</i> pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	SSC
<i>Oncorhynchus tshawytscha</i> pop. 11 chinook salmon - Central Valley spring-run ESU	AFCHA0205L	Threatened	Threatened	G5T2Q	S2	
<i>Oncorhynchus tshawytscha</i> pop. 7 chinook salmon - Sacramento River winter-run ESU	AFCHA0205B	Endangered	Endangered	G5T1Q	S2	
<i>Orcuttia tenuis</i> slender Orcutt grass	PMPOA4G050	Threatened	Endangered	G2	S2	1B.1
<i>Orcuttia viscida</i> Sacramento Orcutt grass	PMPOA4G070	Endangered	Endangered	G1	S1	1B.1



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Pandion haliaetus</i> osprey	ABNKC01010	None	None	G5	S4	WL
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	AFCJB34020	None	None	G3	S3	SSC
<i>Progne subis</i> purple martin	ABPAU01010	None	None	G5	S3	SSC
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S3	
<i>Sagittaria sanfordii</i> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<i>Spea hammondi</i> western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
<i>Spirinchus thaleichthys pop. 2</i> longfin smelt - San Francisco Bay-Delta DPS	AFCHB03040	Endangered	Threatened	G5TNRQ	S1	
<i>Symphyotrichum lentum</i> Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Thamnophis gigas</i> giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
<i>Valley Needlegrass Grassland</i> Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	

Record Count: 72



CNPS Rare Plant Inventory

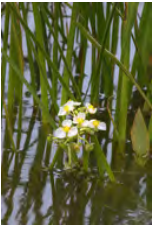
Search Results

15 matches found. Click on scientific name for details

Search Criteria: , CRPR is one of [1A:1B:2A:2B] , Quad is one of [3812164:3812163:3812174:3812173:3812175:3812172:3812165:3812155:3812154:3812153:3812152:3812162]

▲ SCIENTIFIC NAME	COMMON NAME	BLOOMING PERIOD	FED LIST	STATE LIST	CA RARE PLANT RANK	PHOTO
<i>Astragalus tener</i> var. <i>ferrisiae</i>	Ferris' milk-vetch	Apr-May	None	None	1B.1	No Photo Available
<i>Balsamorhiza macrolepis</i>	big-scale balsamroot	Mar-Jun	None	None	1B.2	 ©1998 Dean Wm. Taylor
<i>Calycadenia spicata</i>	spicate calycadenia	May-Sep	None	None	1B.3	 © 2023 Christopher Bronny
<i>Chloropyron molle</i> ssp. <i>hispidum</i>	hispid salty bird's-beak	Jun-Sep	None	None	1B.1	No Photo Available

<i>Downingia pusilla</i>	dwarf downingia	Mar-May	None	None	2B.2		© 2013 Aaron Arthur
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	Apr-Aug	None	CE	1B.2		©2004 Carol W. Witham
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	woolly rose- mallow	Jun-Sep	None	None	1B.2		© 2020 Steven Perry
<i>Juncus leiospermus</i> var. <i>ahartii</i>	Ahart's dwarf rush	Mar-May	None	None	1B.2		© 2004 Carol W. Witham
<i>Juncus leiospermus</i> var. <i>leiospermus</i>	Red Bluff dwarf rush	Mar-Jun	None	None	1B.1		©2016 Dylan Neubauer

<i>Legenere limosa</i>	legenere	Apr-Jun	None	None	1B.1		©2000 John Game
<i>Navarretia myersii</i> ssp. <i>myersii</i>	pincushion navarretia	Apr-May	None	None	1B.1		© 2020 Leigh Johnson
<i>Orcuttia tenuis</i>	slender Orcutt grass	May-Sep(Oct)	FT	CE	1B.1		© 2013 Justy Leppert
<i>Orcuttia viscida</i>	Sacramento Orcutt grass	Apr-Jul(Sep)	FE	CE	1B.1		© Rick York and CNPS
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	May-Oct(Nov)	None	None	1B.2		©2013 Debra L. Cook
<i>Symphyotrichum lentum</i>	Suisun Marsh aster	(Apr)May-Nov	None	None	1B.2	No Photo Available	

Showing 1 to 15 of 15 entries

[Go to top](#)

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2025. Rare Plant Inventory (online edition, v9.5.1). Website <https://www.rareplants.cnps.org> [accessed 29 July 2025].

}

25-003-001 North Watt

From edeng . <edeng@areawest.net>

Date Tue 7/29/2025 2:07 PM

To NMFS SpeciesList - NOAA Service Account <nmfs.wcrca.specieslist@noaa.gov>

Quad Name Rio Linda

Quad Number 38121-F4

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) - X

SRWR Chinook Salmon ESU (E) - X

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) - X

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat - X

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -
ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -
ESA Pinnipeds

Guadalupe Fur Seal (T) -
Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH - X
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -
MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
See list at left and consult Monica DeAngelis
monica.deangelis@noaa.gov
562-980-3232

MMPA Cetaceans -
MMPA Pinnipeds -



Emily Deng | Analyst/Technician | 916.987.3362 | edeng@areawest.net

6248 Main Avenue, Suite C, Orangevale, CA 95662 | areawest.net

AWE Reference Number: 25-003-001



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

07/29/2025 20:27:12 UTC

Project Code: 2025-0128532

Project Name: 25-003-001 SACOG North Watt

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)).

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

PROJECT SUMMARY

Project Code: 2025-0128532
Project Name: 25-003-001 SACOG North Watt
Project Type: Commercial Development
Project Description: Biological Assessment of Specific Plan Area
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.672217849999996,-121.38357944361036,14z>



Counties: Sacramento County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

REPTILES

NAME	STATUS
Northwestern Pond Turtle <i>Actinemys marmorata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

AMPHIBIANS

NAME	STATUS
Western Spadefoot <i>Spea hammondi</i> Population: Northern DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Area West Environmental Inc.

Name: Becky Rozumowicz

Address: 6248 Main Avenue, Suite C

City: Orangevale

State: CA

Zip: 95662

Email: frontdesk@areawest.net

Phone: 9169873362

Appendix B. Representative Site Photos



Unnamed Intermittent Stream between Q Street and Elkhorn Boulevard, facing west.



Annual grassland habitat along 34th Street, facing east.



Disturbed, developed, and annual grassland along Roseville Road and the railroad tracks, facing southwest.



Annual grassland/vernal pool complex habitat along Roseville Road and railroad tracks, facing northwest.

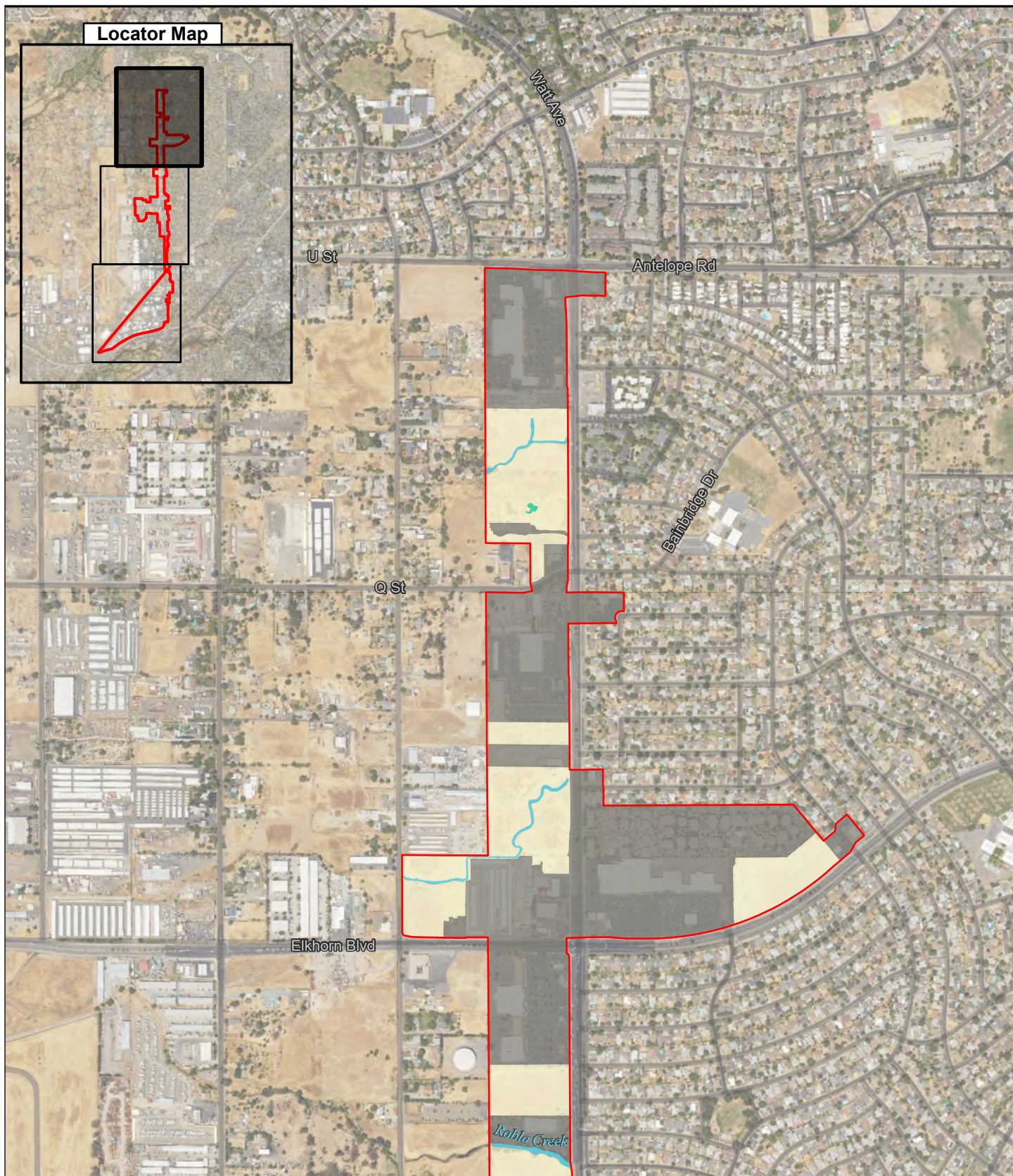


Developed land cover with deep holes under bridge, suitable for nesting birds and bats, north of intersection of Peacekeeper Way and Watt Avenue, facing south.



Annual grassland habitat along Elkhorn Boulevard, facing north.

Appendix C. Additional Figures (Land Cover Types, FEMA Hazards, Soils, Aquatic Resources)



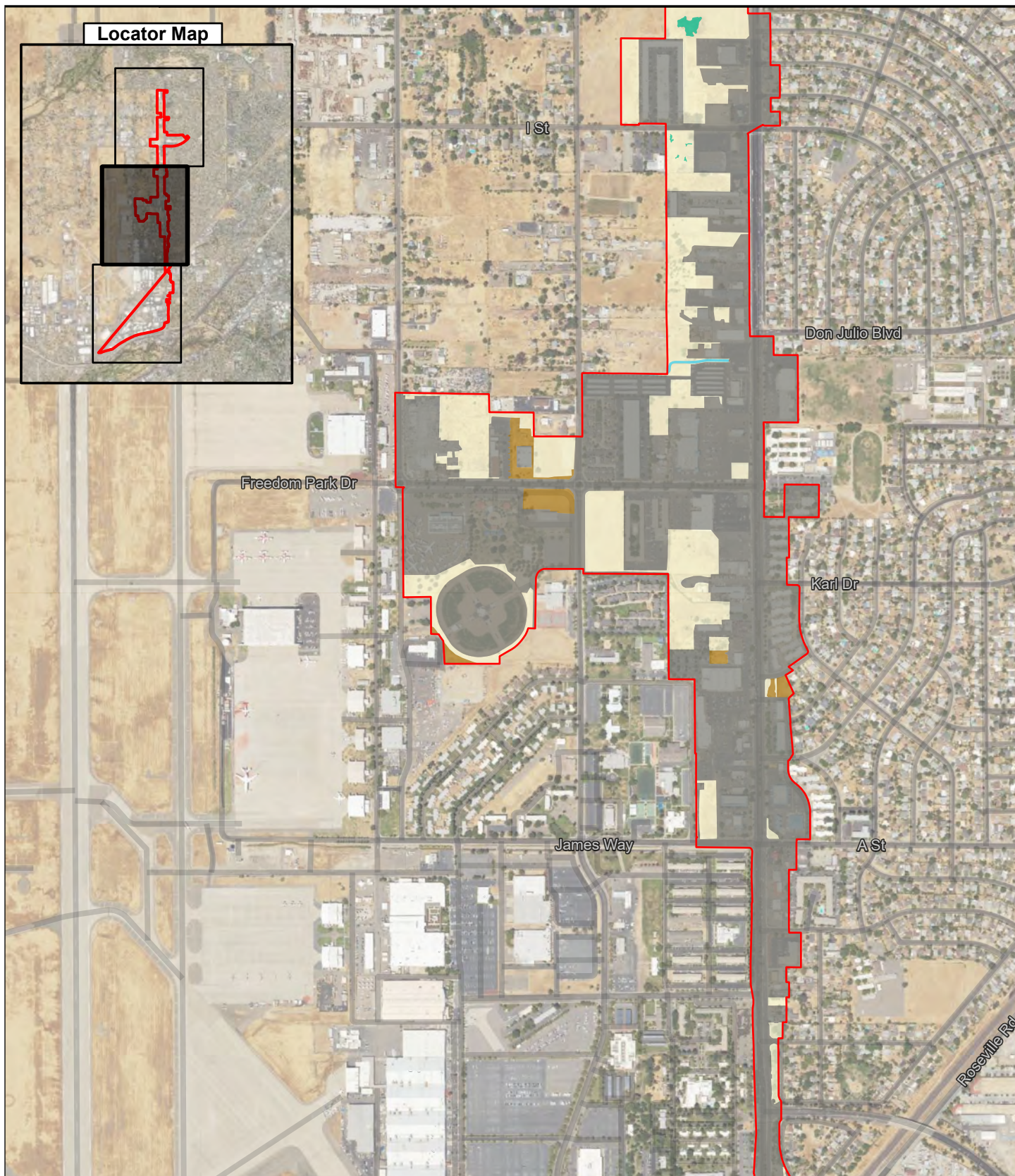
NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

 Specific Plan Area (704 acres)	 Disturbed (9.39 acres)
Land Cover Type	 Intermittent Stream (2.68 acres)
 Annual Grassland (103.30 acres)	 Seasonal Wetland (0.49 acres)
 Annual Grassland/Vernal Pool Complex (18.37 acres)	 Stockpond (0.69 acres)
 Developed (569.15 acres)	



Data Source: - Hexagon Aerial Imagery, 2025; Date: 3-26-26

Document Path: Y:\AWE\25-003-001 SACOG North Watt\Arc Pro Projects\25-003-001 Habitats\25-003-001 Habitats.aprx



NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

 Specific Plan Area (704 acres)	 Disturbed (9.39 acres)
Land Cover Type	 Intermittent Stream (2.68 acres)
 Annual Grassland (103.30 acres)	 Seasonal Wetland (0.49 acres)
 Annual Grassland/Vernal Pool Complex (18.37 acres)	 Stockpond (0.69 acres)
 Developed (569.15 acres)	



Data Source: - Hexagon Aerial Imagery, 2025; Date: 3-26-26

Document Path: Y:\AWE\25-003-001 SACOG North Watt\Arc Pro Projects\25-003-001 Habitats\25-003-001 Habitats.aprx



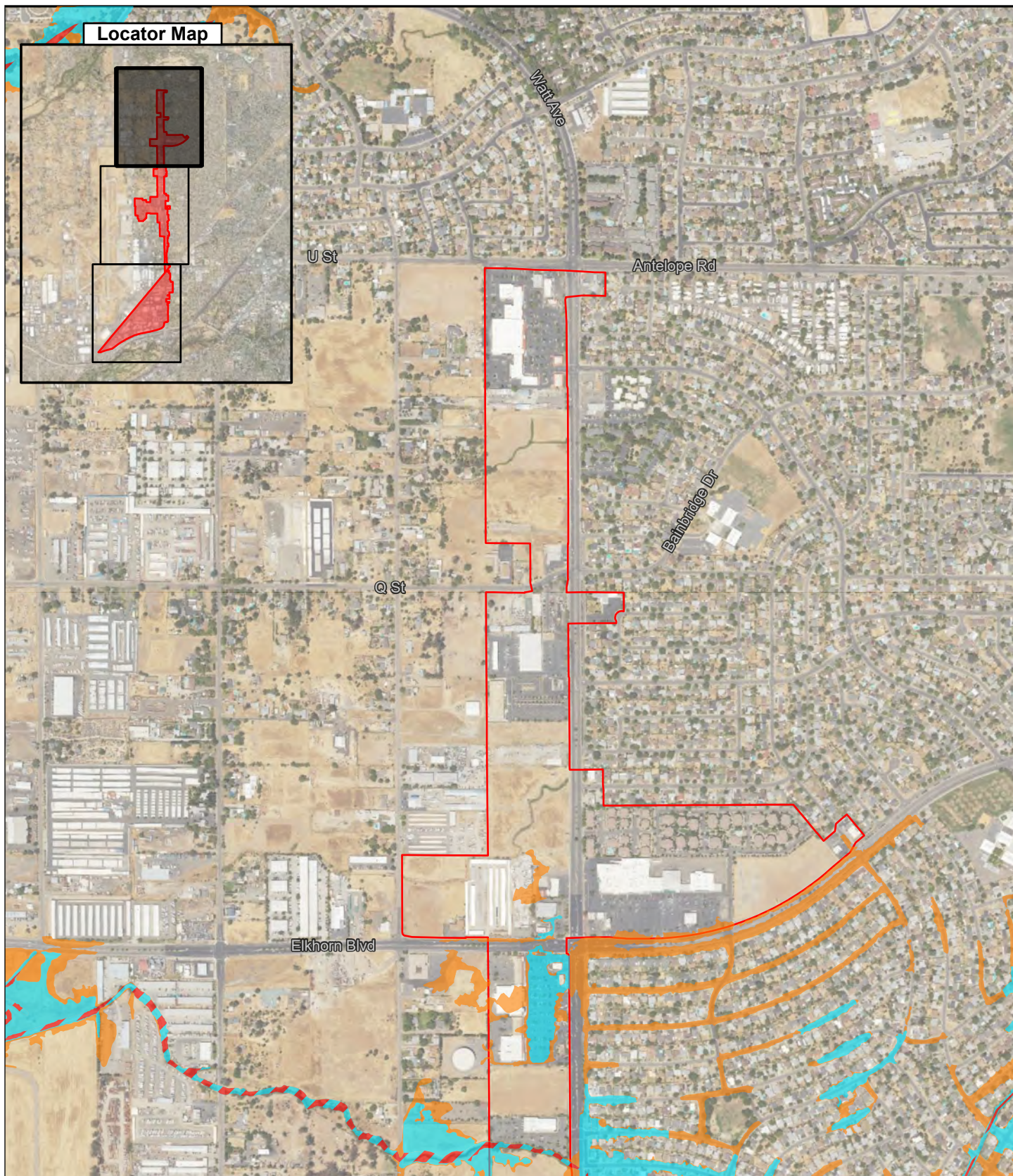
NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

 Specific Plan Area (704 acres)	 Disturbed (9.39 acres)
Land Cover Type	 Intermittent Stream (2.68 acres)
 Annual Grassland (103.30 acres)	 Seasonal Wetland (0.49 acres)
 Annual Grassland/Vernal Pool Complex (18.37 acres)	 Stockpond (0.69 acres)
 Developed (569.15 acres)	



Data Source: - Hexagon Aerial Imagery, 2025; Date: 3-26-26

Document Path: Y:\AWE\25-003-001 SACOG North Watt\Arc Pro Projects\25-003-001 Habitats\25-003-001 Habitats.aprx



NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

Specific Plan Area (704 acres)

FEMA Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

0.2% Annual Chance Flood Hazard

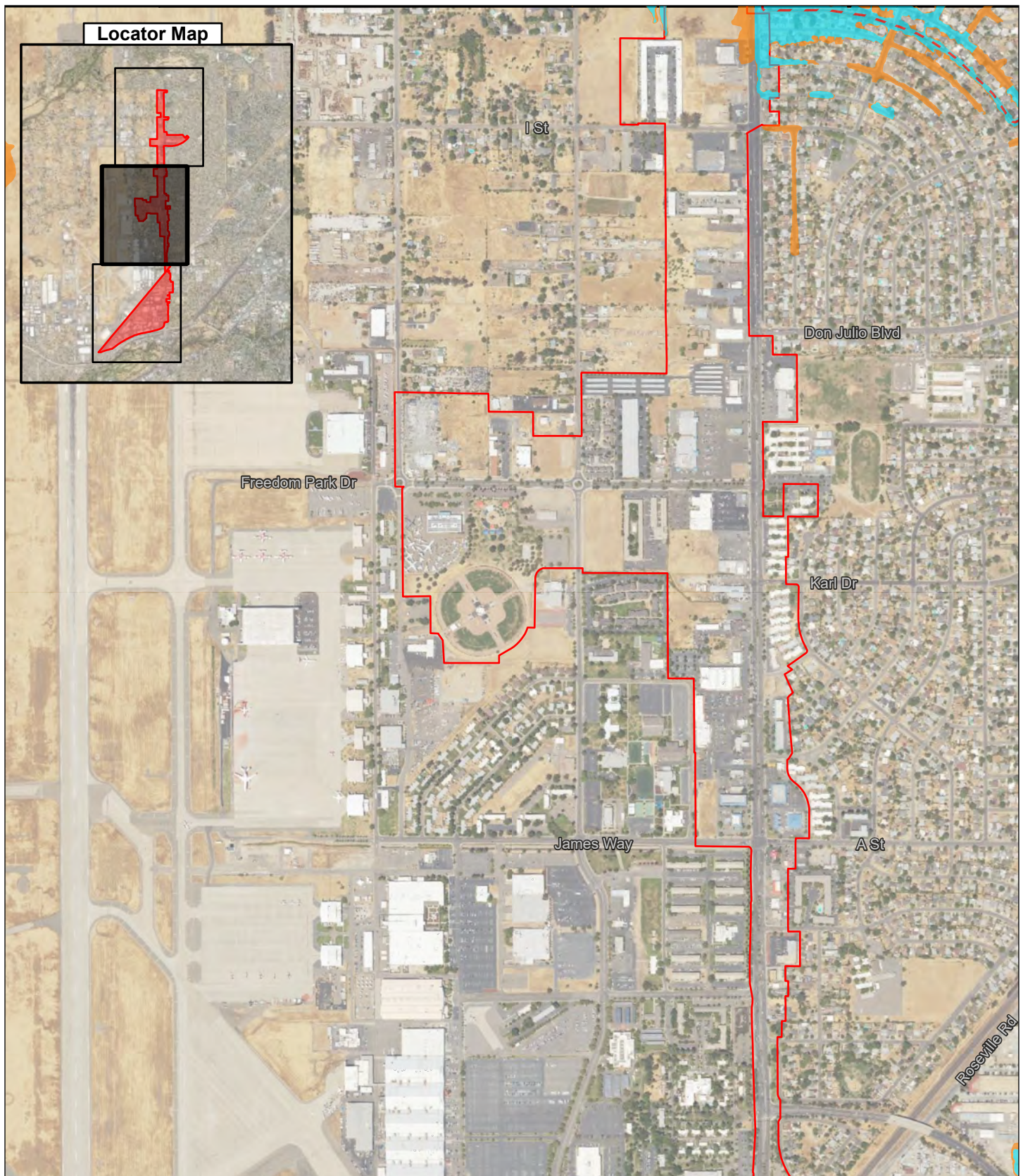


0 500 1,000
Feet



Data Source: - FEMA, 2025; Hexagon Aerial Imagery, 2025; USDA, 2025; Date: 7-30-25

Document Path: C:\Users\smikheal\Documents\ArcGIS\Projects\25-003-001 FEMA\25-003-001 FEMA.aprx



NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

 Specific Plan Area (704 acres)

FEMA Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

0.2% Annual Chance Flood Hazard

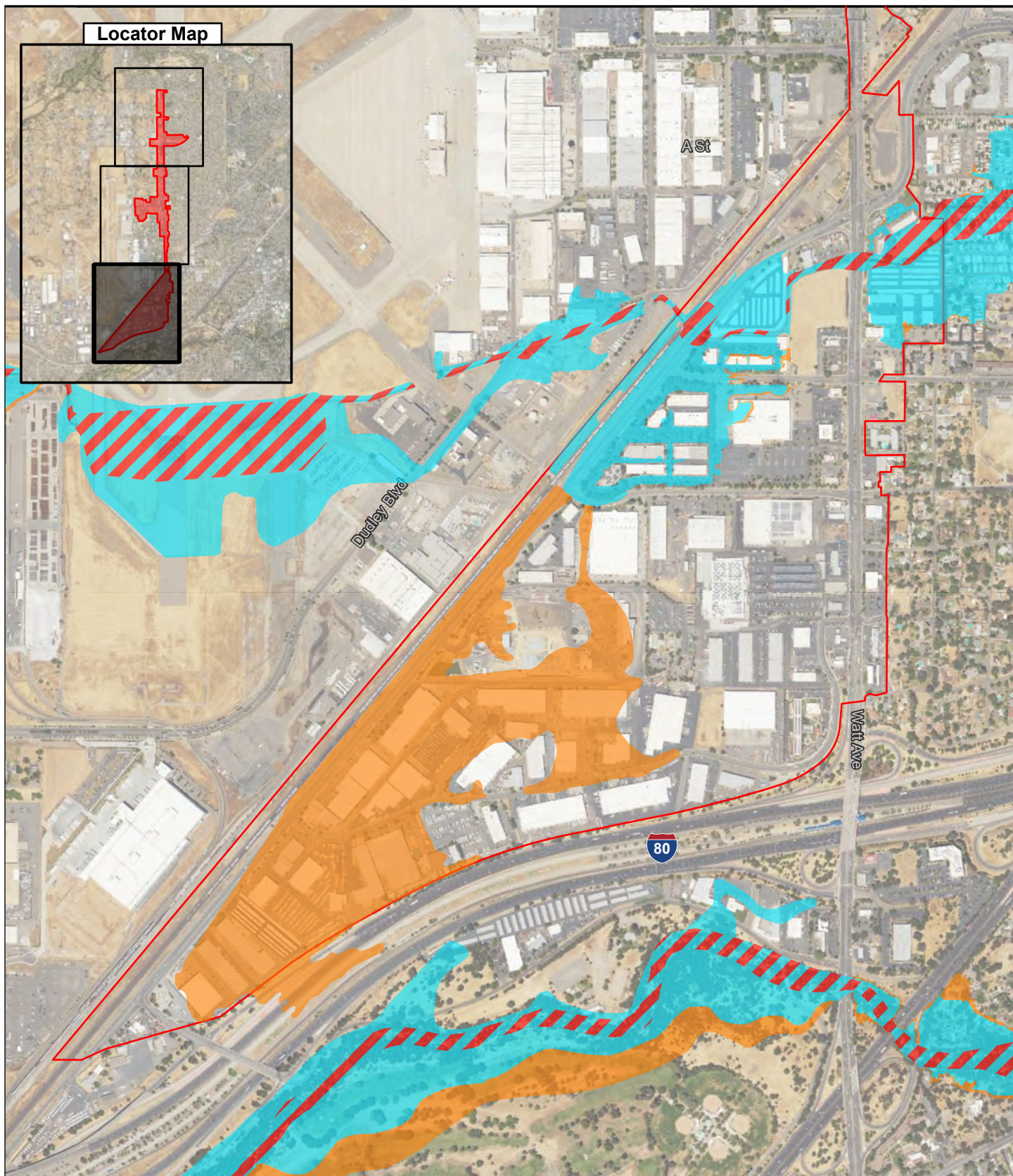


0 500 1,000
Feet



Data Source: - FEMA, 2025; Hexagon Aerial Imagery, 2025; USDA, 2025; Date: 7-30-25

Document Path: C:\Users\smikheal\Documents\ArcGIS\Projects\25-003-001 FEMA\25-003-001 FEMA.aprx



NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

Specific Plan Area (704 acres)

FEMA Flood Hazard Zones

1% Annual Chance Flood Hazard

Regulatory Floodway

0.2% Annual Chance Flood Hazard

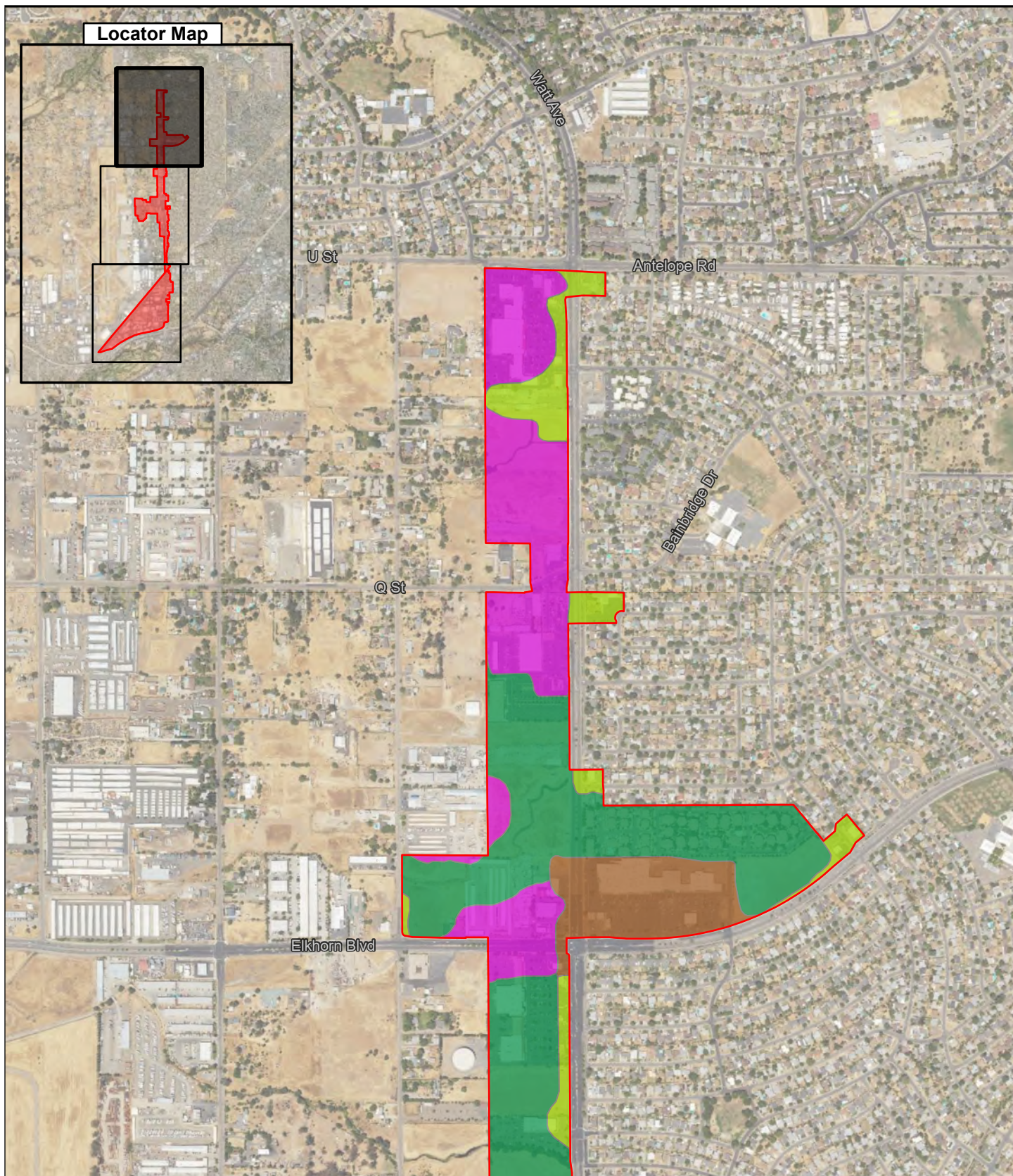


0 500 1,000
Feet



Data Source: - FEMA , 2025; Hexagon Aerial Imagery, 2025; USDA, 2025; Date: 7-30-25

Document Path: C:\Users\smikhela\Documents\ArcGIS\Projects\25-003-001 FEMA\25-003-001 FEMA.aprx



NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

 Specific Plan Area (704 acres)

Soil Map Units

144 - Fiddyment fine sandy loam, 0 to 1 percent slopes

149 - Fiddyment-Urban land complex, 1 to 8 percent slopes

211 - San Joaquin fine sandy loam, 0 to 3 percent slopes

220 - San Joaquin-Urban land complex, 0 to 3 percent slopes

227 - Urban land

229 - Urban land-Xerarents-Fiddyment complex, 0 to 8 percent slopes

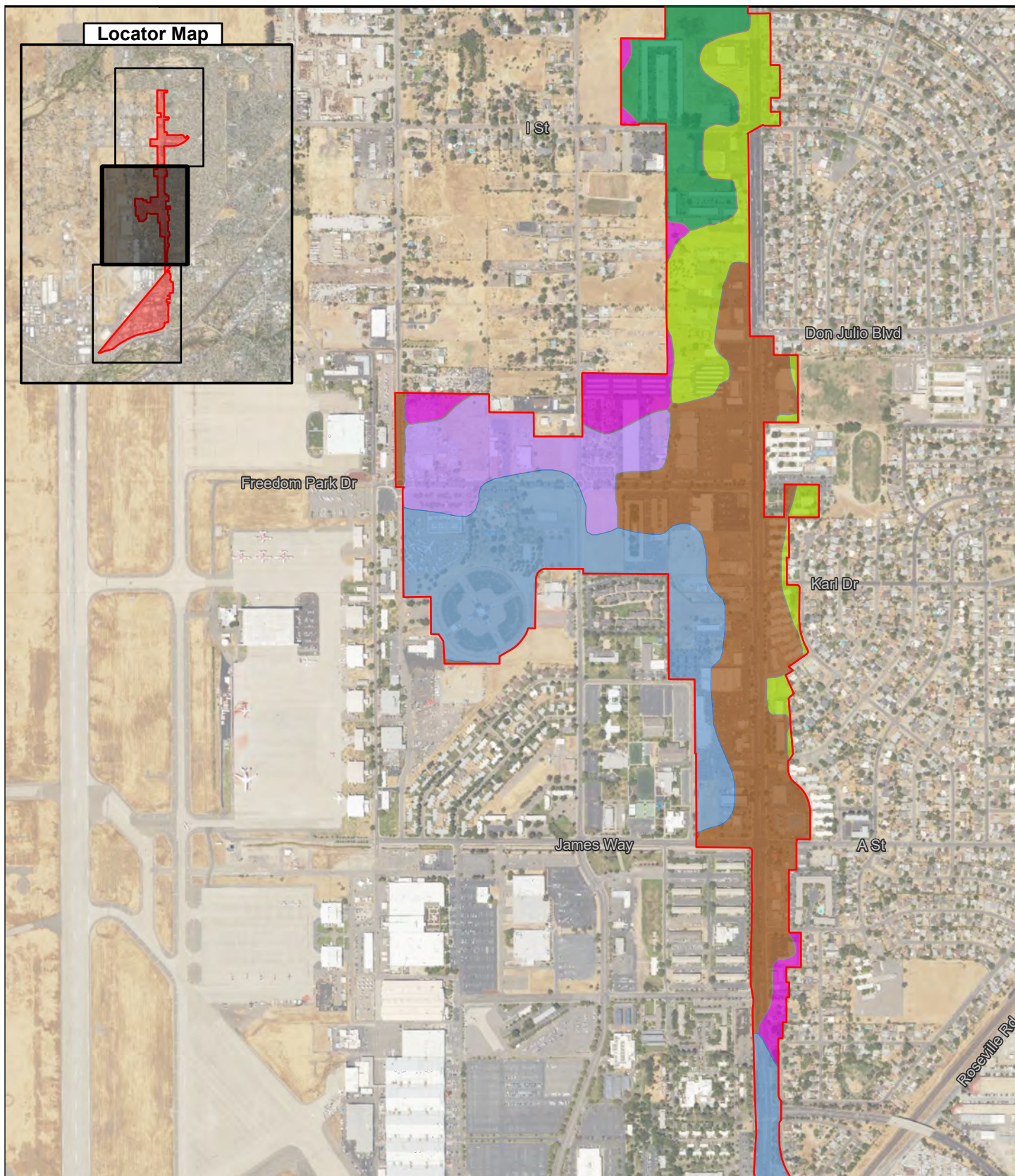
240 - Xerarents-Urban land-San Joaquin complex, 0 to 5 percent slopes

0 500 1,000
Feet



Data Source: - Hexagon Aerial Imagery, 2025; USDA, 2025; Date: 7-30-25

Document Path: C:\Users\smikheia\Documents\ArcGIS\Projects\25-003-001 Soils\25-003-001 Soils.aprx



NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

 Specific Plan Area (704 acres)

Soil Map Units

144 - Fiddymont fine sandy loam, 0 to 1 percent slopes

149 - Fiddymont-Urban land complex, 1 to 8 percent slopes

211 - San Joaquin fine sandy loam, 0 to 3 percent slopes

220 - San Joaquin-Urban land complex, 0 to 3 percent slopes

227 - Urban land

229 - Urban land-Xerarents-Fiddymont complex, 0 to 8 percent slopes

240 - Xerarents-Urban land-San Joaquin complex, 0 to 5 percent slopes

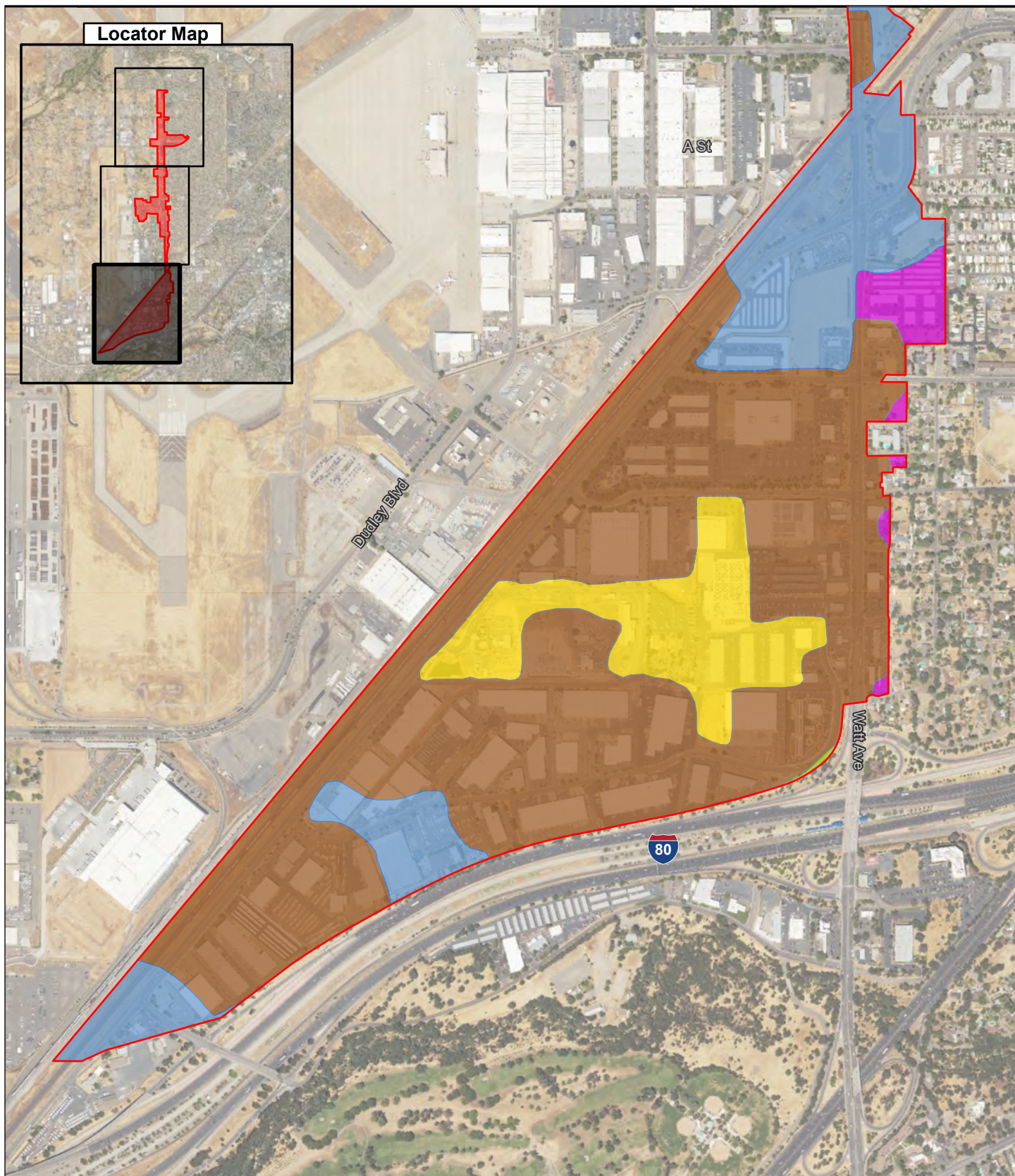


0 500 1,000
Feet



Data Source: - Hexagon Aerial Imagery, 2025; USDA, 2025; Date: 7-30-25

Document Path: C:\Users\smikheal\Documents\ArcGIS\Projects\25-003-001 Soils\25-003-001 Soils.aprx



NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

 Specific Plan Area (704 acres)

Soil Map Units

144 - Fiddymment fine sandy loam, 0 to 1 percent slopes

149 - Fiddymment-Urban land complex, 1 to 8 percent slopes

211 - San Joaquin fine sandy loam, 0 to 3 percent slopes

220 - San Joaquin-Urban land complex, 0 to 3 percent slopes

227 - Urban land

229 - Urban land-Xerarents-Fiddymment complex, 0 to 8 percent slopes

240 - Xerarents-Urban land-San Joaquin complex, 0 to 5 percent slopes

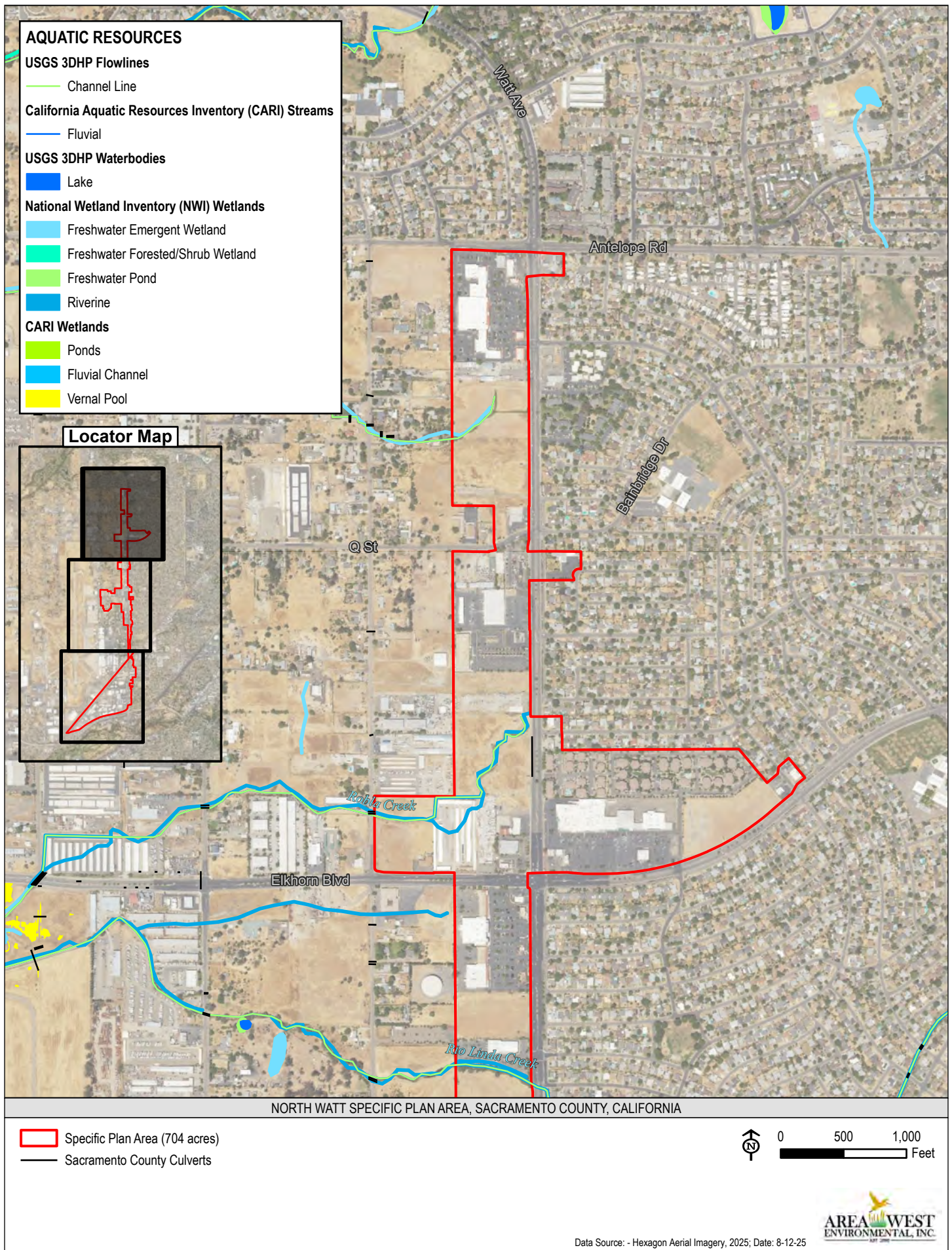


0 500 1,000
Feet



Data Source: - Hexagon Aerial Imagery, 2025; USDA, 2025; Date: 7-30-25

Document Path: C:\Users\mikhel\Documents\ArcGIS\Projects\25-003-001 Soils\25-003-001 Soils.aprx



AQUATIC RESOURCES

USGS 3DHP Flowlines

- Canal
- Channel Line

California Aquatic Resources Inventory (CARI) Streams

- Fluvial

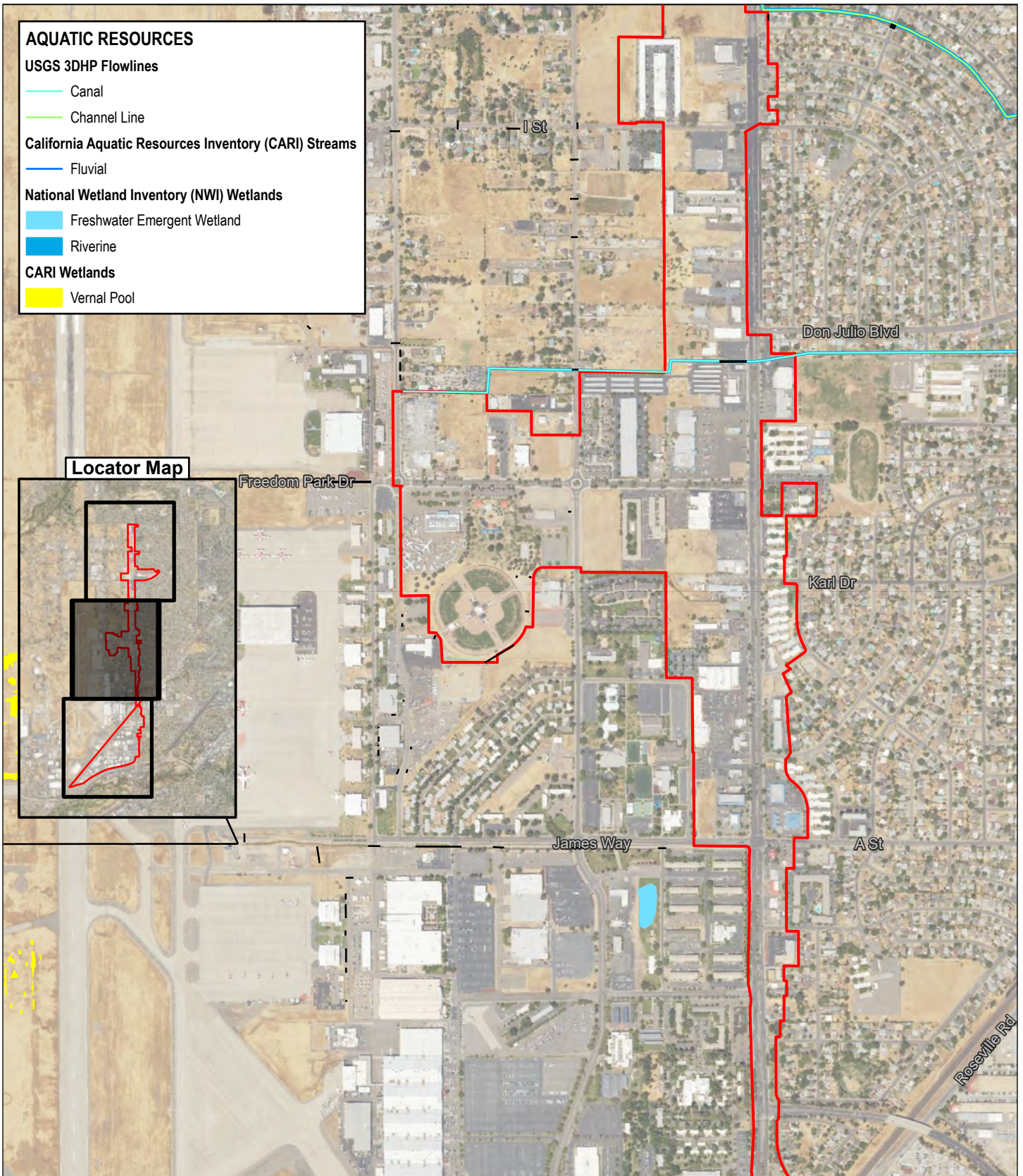
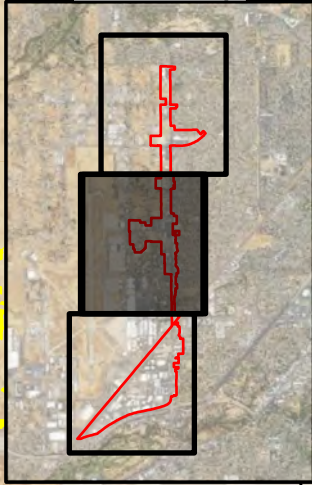
National Wetland Inventory (NWI) Wetlands

- Freshwater Emergent Wetland
- Riverine

CARI Wetlands

- Vernal Pool

Locator Map



NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

- Specific Plan Area (704 acres)
- Sacramento County Culverts

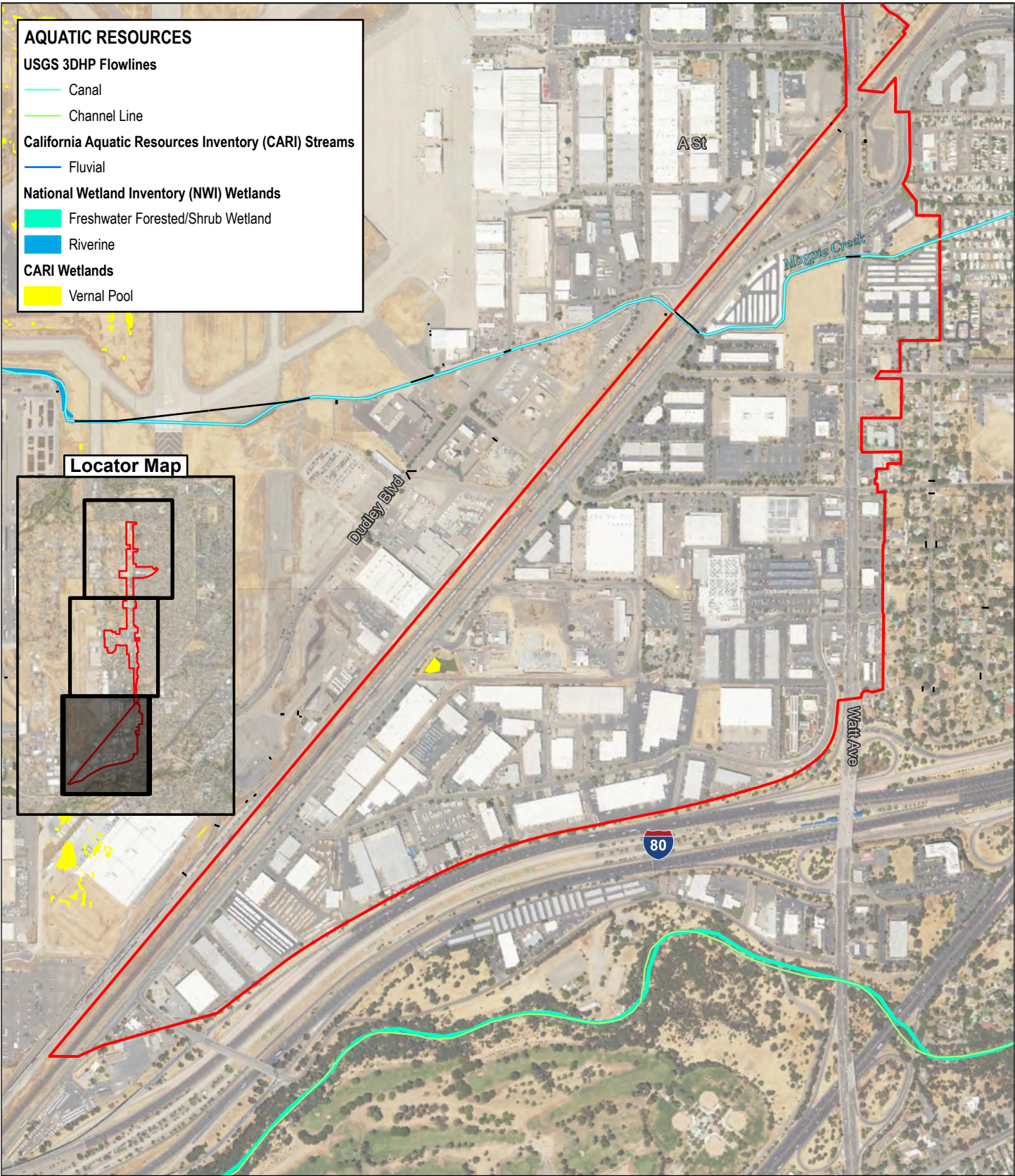


0 500 1,000
Feet



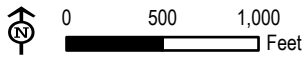
Data Source: - Hexagon Aerial Imagery, 2025; Date: 8-12-25

Document Path: Y:\AWE\25-003-001 SACOG North Watt\Arc Pro Projects\25-003-001 Aquatic Resources\25-003-001 Aquatic Resources.aprx



NORTH WATT SPECIFIC PLAN AREA, SACRAMENTO COUNTY, CALIFORNIA

- Specific Plan Area (704 acres)
- Sacramento County Culverts



Data Source: - Hexagon Aerial Imagery, 2025; Date: 8-12-25

Appendix D. Potential to Occur Table

Table D-1. Special-status Plants with Potential to Occur in the Vicinity of the SPAⁱ

Common and Scientific Name	Legal Status ⁱⁱ	Distribution	Habitat Association	Identification Period	Habitat Present/Absent ⁱⁱⁱ	Potential to Occur/ Rationale and Survey Results ^{iv}
	Federal/State/CNPS					
Ferris' milk-vetch <i>Astragalus tener</i> var. <i>ferrisiae</i>	--/--/1B.1	Butte, Colusa, Glenn, Solano, Sutter, Yolo, and Yuba counties.	Meadows and seeps (vernally mesic) and valley and foothill grassland (subalkaline flats). Elevation (ft): 5-245.	April – May	P	Likely. The SPA contains suitable habitat for the species. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Big-scale balsamroot <i>Balsamorhiza macrolepis</i>	--/--/1B.2	Alameda, Amador, Butte, Colusa, El Dorado, Lake, Mariposa, Napa, Placer, Santa Clara, Shasta, Solano, Sonoma, Tehama, and Tuolumne counties.	Chaparral, cismontane woodland, and valley and foothill grassland. Elevation (ft): 150-5,100.	May – June	P	Likely. The SPA contains suitable habitat for the species. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Spicate calycadenia <i>Calycadenia spicata</i>	--/--/1B.3	Amador, Butte, Calaveras, El Dorado, Fresno, Kern, Nevada, Placer, Sacramento, San Joaquin, Stanislaus, Tulare, Tuolumne, and Yuba counties.	Cismontane woodland and valley and foothill grassland. Elevation (ft): 130-4,595.	May – September	P	Likely. The SPA contains suitable habitat for the species. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
hispid salty bird's-beak <i>Chloropyron molle</i> ssp. <i>hispidum</i>	--/--/1B.1	Alameda, Kern, Merced, Placer, and Solano counties.	Meadows and seeps, playas, valley and foothill grasslands. Elevation (ft): 5-510.	June – September	P	Unlikely. The SPA contains minimal suitable habitat for the species but the species hasn't been observed in Sacramento County. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.

Table D-1. Special-status Plants with Potential to Occur in the Vicinity of the SPAⁱ

Common and Scientific Name	Legal Status ⁱⁱ	Distribution	Habitat Association	Identification Period	Habitat Present/Absent ⁱⁱⁱ	Potential to Occur/ Rationale and Survey Results ^{iv}
	Federal/State/CNPS					
Dwarf downingia <i>Downingia pusilla</i>	--/--/2B.2	Fresno, Merced, Napa, Placer, Sacramento, San Joaquin, Solano, Sonoma, Stanislaus, Tehama, and Yuba counties.	Valley and foothill grassland (mesic) and vernal pools. Elevation (ft): 5-1,460.	March – May	P	Likely. The SPA contains suitable habitat for the species. There are four CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	--/SE/1B.2	Fresno, Lake, Lassen, Madera, Mendocino, Merced, Modoc, Placer, Sacramento, San Joaquin, Shasta, Siskiyou, Solano, Sonoma, and Tehama counties.	Marshes and swamps (lake margins) and vernal pools. Elevation (ft): 35-7,790.	April – August	P	Likely. The SPA contains suitable habitat for the species. There are two CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Woolly rose-mallow <i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	--/--/1B.2	Butte, Colusa, Contra Costa, Glenn, Sacramento, San Joaquin, Solano, Sutter, Yolo and counties.	Found in marshes and swamps (freshwater). Elevation (ft): 0-395.	June – September	P	Likely. The SPA contains suitable habitat for the species. There are no CNDDDB occurrences within a 5-mile radius of the Project site.
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	--/--/1B.2	Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba counties.	Valley and foothill grassland (mesic). Elevation (ft): 100-750.	March – May	P	Likely. The SPA contains suitable habitat for the species. There are no CNDDDB occurrences within a 5-mile radius of the Project site.

Table D-1. Special-status Plants with Potential to Occur in the Vicinity of the SPAⁱ

Common and Scientific Name	Legal Status ⁱⁱ	Distribution	Habitat Association	Identification Period	Habitat Present/Absent ⁱⁱⁱ	Potential to Occur/ Rationale and Survey Results ^{iv}
	Federal/State/CNPS					
Red Bluff dwarf rush <i>Juncus leiospermus</i> var. <i>leiospermis</i>	--/--/1B.1	Butte, Placer, Shasta, and Tehama counties.	Chaparral, cismontane woodland, meadows and seep, valley and foothill grasslands, vernal pools, and vernal mesic. Elevation (ft): 115-4,100.	March – June	P	Likely. The SPA contains suitable habitat for the species. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Legenere <i>Legenere limosa</i>	--/--/1B.1	Alameda, Lake, Monterey, Napa, Placer, Sacramento, San Joaquin, San Mateo, Santa Clara, Shasta, Solano, Sonoma, Stanislaus, Tehama, and Yuba counties.	Vernal pools. Elevation (ft): 5-2,885.	April – June	P	Likely. The SPA contains suitable habitat for the species. There are two CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Pincushion navarretia <i>Navarretia myersii</i> ssp. <i>myersii</i>	--/--/1B.1	Amador, Calaveras, Madera, Merced, Placer, and Sacramento counties.	Vernal pools. Elevation (ft): 65-1,085.	April – May	P	Likely. The SPA contains suitable habitat for the species. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Slender Orcutt grass <i>Orcuttia tenuis</i>	FT/SE/1B.1	Butte, Lake, Lassen, Modoc, Plumas, Sacramento, Shasta, Siskiyou, and Tehama counties.	Vernal pools, gravelly (often). Elevation (ft): 115-5,775.	May – September (October)	P	Likely. The SPA contains suitable habitat for the species. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Sacramento Orcutt grass <i>Orcuttia viscida</i>	FE/SE/1B.1	Sacramento County.	Vernal pools. Elevation (ft): 100-330.	April – July (September)	P	Likely. The SPA contains suitable habitat for the species. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.

Table D-1. Special-status Plants with Potential to Occur in the Vicinity of the SPAⁱ

Common and Scientific Name	Legal Status ⁱⁱ	Distribution	Habitat Association	Identification Period	Habitat Present/Absent ⁱⁱⁱ	Potential to Occur/ Rationale and Survey Results ^{iv}
	Federal/State/CNPS					
Sanford's arrowhead <i>Sagittaria sanfordii</i>	--/--/1B.2	Butte, Del Norte, El Dorado, Fresno, Kings, Los Angeles, Madera, Marin, Mariposa, Merced, Napa, Orange, Sacramento, San Bernardino, San Joaquin, San Mateo, Santa Clara, Shasta, Solano, Sutter, Tehama, Tulare, Ventura, Yuba counties.	Found in marshes and swamps (shallow freshwater). Elevation (ft): 0-2,135.	May – October (November)	P	Likely. The SPA contains suitable habitat for the species. There are seven CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Suisun Marsh aster <i>Symphotrichum lentum</i>	--/--/1B.2	Contra Costa, Napa, Sacramento, San Joaquin, Solano, and Yolo counties.	Marshes and swamps (brackish, freshwater). Elevation (ft): 0-10.	(April) May – November	P	Likely. The SPA contains suitable habitat for the species. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.

ⁱ References for distribution, habitat association, bloom period, and plant records:

California Native Plant Society, Rare Plant Program. 2025. Rare Plant Inventory (online edition, v9.5.1). CNPS; Sacramento, California. Website <http://www.rareplants.cnps.org>.

CDFW (California Department of Fish and Wildlife). 2025. California Natural Diversity Database – RareFind 5 and BIOS 6. CDFW Biogeographic Data Branch; Sacramento, California. Available at: <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>

ii Status explanations:

-- = no listing

Federal

FE = listed as endangered under the federal Endangered Species Act.

FT = listed as threatened under the federal Endangered Species Act.

State

SE = listed as endangered under the California Endangered Species Act.

California Native Plant Society

1B = List 1B species: rare, threatened, or endangered in California and elsewhere.

2B = List 2B species: rare, threatened, or endangered in California and elsewhere.

0.1= Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat).

0.2= Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat).

0.3= Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

iii Habitat Present/Absent Determination:

P = Suitable habitat was observed within the SPA during the windshield survey.
A = Suitable habitat was not observed within the SPA during the windshield survey

iv Rational/ Survey Results:

Definitions for the Potential to Occur:

Unlikely: Suitable habitat was not observed during windshield survey.

Likely: Suitable habitat was observed during the windshield survey.

Known: Suitable habitat was observed during the windshield survey and there are known occurrences within the Specific SPA.

Table D-2. Special-status Wildlife with Potential to Occur in the Vicinity of the Project

Common Name Scientific Name	Legal Status ⁱ		Distribution	Habitat Requirements	Habitat Present/ Absent ⁱⁱ	Potential to Occur/Rationale ⁱⁱⁱ
	Federal	State				
Invertebrates						
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	--	Central Valley, Central and South Coast Ranges from Tehama County to Santa Barbara County; isolated populations also in Riverside County.	Common in vernal pools and seasonal wetlands; also found in sandstone rock outcrop pools.	P	Likely. The SPA contains suitable vernal pool habitat for this species. There are 18 CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE	--	Central Valley from Shasta County south to Merced County.	Vernal pools, vernal lakes, and other seasonal wetlands. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	P	Likely. The SPA contains suitable vernal pool habitat for this species. There are 13 CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Monarch butterfly <i>Danaus plexippus</i>	PFT	--	Found throughout California (Marty and Zakowski 2019.) Overwinter in central to southern California coastal region.	California overwintering habitat includes eucalyptus, Monterey pines, and Monterey cypresses. Milkweed is the sole larval host plant.	P	Likely. Though milkweed was not observed during the windshield survey, suitable habitat for milkweed is present within the SPA. There are no CNDDDB occurrences within a 5-mile radius of the SPA.
Crotch’s bumblebee <i>Bombus crotchii</i>	--	SCE	Found primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California. It also occurs in Mexico (Baja California and Baja California Sur) and has been documented in southwest Nevada, near the California border.	Open grasslands and scrub habitats. Needs abundant floral resources. Commonly visits the following plant families: Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Hydrophyllaceae, Asclepiadaceae, and Boraginaceae.	P	Likely. Suitable habitat is present for this species within the annual grassland habitat and manicured portions of the developed habitat. There is one CNDDDB occurrence within a 5-mile radius of the SPA.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	--	Central Valley and surrounding foothills below 500-foot elevations.	Dependent on elderberry shrubs (host plant) as a food plant; potential habitat is shrubs with stems 1 inch in diameter within Central Valley.	A	Unlikely. Elderberry shrubs were not observed within the SPA. There are 11 CNDDDB occurrences within a 5-mile radius of the SPA.

Table D-2. Special-status Wildlife with Potential to Occur in the Vicinity of the Project

Common Name Scientific Name	Legal Status ⁱ		Distribution	Habitat Requirements	Habitat Present/ Absent ⁱⁱ	Potential to Occur/Rationale ⁱⁱⁱ
	Federal	State				
Fish						
Steelhead – Central Valley DPS <i>Oncorhynchus mykiss iridues pop. 11</i>	FT	--	Sacramento and San Joaquin Rivers and tributaries, Sacramento-San Joaquin Delta, San Francisco Bay.	Cool, well-oxygenated water with moderate size gravel for spawning and cover for rearing.	A	Unlikely. Suitable habitat is absent for this species within the SPA. Intermittent streams within the SPA are concrete-lined or have a soil substrate. There are two CNDDDB occurrences of this species within a 5-miles radius of the SPA.
Chinook salmon – Central Valley spring-run ESU <i>Onchorhynchus tshawytscha pop.11</i>	FT	ST	Sacramento River, Mill Creek, Deer Creek, Butte Creek, Yuba River, Feather River, Sacramento-San Joaquin Delta, San Francisco Bay.	Cool water with moderate size gravel for spawning and cover for rearing.	A	Unlikely. Suitable habitat is absent for this species within the SPA. Intermittent streams within the SPA are concrete-lined or have a soil substrate. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Chinook salmon - Sacramento River winter-run ESU <i>Oncorhynchus tshawytscha pop. 7</i>	FE	SE	Sacramento River, Sacramento-San Joaquin Delta, San Francisco Bay. Historically spawned in the upper reaches of the Sacramento River, McCloud River and lower Pit River. Currently, spawning is limited to reaches of the Sacramento River below Keswick Dam. Does not spawn in tributary streams.	Cold, clean water with moderate size gravel for spawning and egg incubation. Water temperatures between 6-14 degrees Celsius are required for hatching.	A	Unlikely. Suitable habitat is absent for this species within the SPA. Intermittent streams within the SPA are concrete-lined or have a soil substrate. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.

Table D-2. Special-status Wildlife with Potential to Occur in the Vicinity of the Project

Common Name Scientific Name	Legal Status ⁱ		Distribution	Habitat Requirements	Habitat Present/ Absent ⁱⁱ	Potential to Occur/Rationale ⁱⁱⁱ
	Federal	State				
Green sturgeon-southern DPS <i>Acipenser medirostris</i> pop. 1	FT	SSC	This species is found along the west coast of Mexico, the United States, south of the Eel River. They are believed to spawn in the Rogue River, Klamath River Basin, and the Sacramento River. Adults present year-round along the California Coast from Monterey Bay to the Oregon border. Adults/subadults occur in the Humboldt Bay and San Francisco Bay and Delta during the summer and fall. Spawn in the Sacramento, Feather, and possibly the Yuba rivers.	This species spawns in deep pools or "holes" in large, turbulent, freshwater river. Specific spawning habitat preferences are unclear, but eggs likely are broadcast over large cobble substrates, but range from clean sand to bedrock substrates as well. Adults live in oceanic waters, bays, and estuaries when not spawning. Adult and subadults habitat include marine and estuarine waters. Spawning habitat includes cool, deep, swift flowing river reaches over gravel and cobble bottoms.	A	Unlikely. Suitable habitat is absent for this species within the SPA. Intermittent streams within the SPA are concrete-lined or have a soil substrate. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Sacramento perch <i>Archoplites interruptus</i>	--	SSC	Most populations are introduced, except Clear Lake. Introduced throughout the state including the upper Klamath basin, upper Pit River watershed, Walker River watershed, Mono Lake watershed, and Owens River watershed, and may exist in Sonoma Reservoir in the Russian River watershed.	Sacramento perch are most often found in warm reservoirs and ponds where summer temperature range from 18-28°C.	A	Unlikely. Suitable permanent water bodies are not present within the SPA. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	--	SSC	Formerly throughout Sacramento-San Joaquin River drainage, CA; now restricted to San Francisco Bay Delta and lower Sacramento River.	Backwaters and pools of rivers; lakes. Tolerant of brackish water.	A	Unlikely. Suitable habitat is absent for this species within the SPA. Intermittent streams within the SPA are concrete-lined or have a soil substrate. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.

Table D-2. Special-status Wildlife with Potential to Occur in the Vicinity of the Project

Common Name Scientific Name	Legal Status ⁱ		Distribution	Habitat Requirements	Habitat Present/ Absent ⁱⁱ	Potential to Occur/Rationale ⁱⁱⁱ
	Federal	State				
Longfin smelt - San Francisco Bay-Delta DPS <i>Spirinchus thaleichthys pop. 2</i>	FE	ST	Scattered populations of longfin smelt occur along the Pacific coast of North America from Alaska to the San Francisco Estuary. Historically found in the San Francisco Estuary and the Sacramento/San Joaquin Delta (Bay-Delta), Humboldt Bay, and the estuaries of the Eel River and Klamath River.	Longfin smelt larvae and small juveniles are rarely found in water warmer than 71.6 °F (22 °C). Competent-swimming young juveniles disperse toward more-saline and deeper-water habitats. Mature longfin smelt require cool-to-cold [less than 60.8 °F (16 °C)] freshwater habitats for spawning. Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 parts per thousand but can be found in completely freshwater to almost pure seawater.	A	Unlikely. Suitable habitat is absent for this species within the SPA. Freshwater intermittent streams within the SPA are concrete-lined or have a soil substrate. There are no CNDDB occurrences of this species within a 5-mile radius of the SPA.
Amphibians						
Western spadefoot <i>Spea hammondi</i>	PFT	SSC	Sierra Nevada foothills, Central Valley, Coast Ranges, and coastal counties in southern California	Shallow streams with riffles and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands. Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Aquatic habitat is essential for breeding and egg-laying.	P	Somewhat Likely. Marginally suitable habitat is present within the vernal pool complex habitat, but this habitat is surrounded by active railroad tracks and high-density roadways. There are two CNDDB occurrences within a 5-mile radius of the SPA.
Reptiles						
Northwestern pond turtle <i>Actinemys marmorata</i>	PFT	SSC	California, Nevada, Oregon, and Washington.	A semi-aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet (1,828 meters) elevation. Needs basking sites and suitable upland habitat (friable soil exposed to full sun) within 0.5 km of water for egg-laying. (CDFW 2023)	P	Likely. There is suitable aquatic and upland habitat for the species within the SPA. There are two CNDDB occurrences within a 5-mile radius of the SPA.

Table D-2. Special-status Wildlife with Potential to Occur in the Vicinity of the Project

Common Name Scientific Name	Legal Status ⁱ		Distribution	Habitat Requirements	Habitat Present/ Absent ⁱⁱ	Potential to Occur/Rationale ⁱⁱⁱ
	Federal	State				
Giant gartersnake <i>Thamnophis gigas</i>	FT	ST	Central Valley from Fresno north to the Gridley/Sutter Buttes area.	Sloughs, canals, and other small slow flowing water-ways where there is a prey base of small fish and amphibians. Requires grassy banks and emergent vegetation for basking and areas of high ground protected from flooding during winter.	P	Somewhat Likely. Marginally suitable habitat is present in the intermittent streams within the SPA. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Birds						
Tricolored blackbird <i>Agelaius tricolor</i>	--	ST/ SSC	Largely endemic to California; permanent residents in the Central Valley from Butte County to Kern County; at scattered coastal locations from Marin County south to San Diego County; breeds at scattered locations in Lake, Sonoma, and Solano Counties; rare nester in Siskiyou, Modoc, and Lassen Counties. Sacramento-San Joaquin Valleys and low foothills of coast ranges and Sierra Nevada.	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields; nesting habitat must be large enough to support 50 pairs; probably requires water at or near the nesting colony; requires large foraging areas, including marshes, pastures, agricultural wetlands, dairies, and feedlots, where insect prey is abundant.	P	Somewhat Likely. Small areas of suitable habitat are present within the SPA but are surrounded by dense urban areas. There is one CNDDDB occurrence of this species within a 5-mile radius of the SPA.
Grasshopper sparrow <i>Ammodramus</i> <i>savannarum</i>	--	SSC	An uncommon and local, summer resident and breeder in foothills and lowlands west of the Cascade-Sierra Nevada crest from Mendocino and Trinity cos. south to San Diego Co. Also has been found in Shasta Valley, Siskiyou Co.	Dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches. In southern California occurs mainly on hillsides and mesas in coastal districts, but has bred up to 5000 feet amsl in San Jacinto Mountains.	A	Unlikely. Suitable shrubland habitat is absent from the SPA. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.

Table D-2. Special-status Wildlife with Potential to Occur in the Vicinity of the Project

Common Name Scientific Name	Legal Status ⁱ		Distribution	Habitat Requirements	Habitat Present/ Absent ⁱⁱ	Potential to Occur/Rationale ⁱⁱⁱ
	Federal	State				
Burrowing owl <i>Athene cunicularia</i>	--	SCE/ SCC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast. Central and southern coastal habitats, and Central Valley.	Annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Dependent upon burrowing mammals (especially California ground squirrel) for burrows and other refugia, such as culverts.	P	Somewhat Likely. Marginally suitable foraging and nesting habitat is present within the annual grassland habitat of the SPA. There are 6 CNDDB occurrences of this species within a 5-mile radius of the SPA.
Golden eagle <i>Aquila chrysaetos</i>	--	FP	Foothills and mountains through-out California; uncommon nonbreeding visitor to lowlands such as the Central Valley. Concentrated in the Central Valley and coastal valleys.	Cliffs and escarpments or tall trees for nesting; annual grasslands, chaparral, and oak wood-lands with plentiful medium and large-sized mammals for prey.	P	Unlikely. Foraging habitat is small disjunct parcels within the SPA, nesting habitat is absent. There are no CNDDB occurrences of this species within a 5-mile radius of the SPA.
California black rail <i>Laterallus jamaicensis coturniculus</i>	--	ST/FP	Known to occur in Alameda, Butte, Contra Costa, Imperial, Marin, Napa, Nevada, Placer, Riverside, Sacramento, San Bernardino, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Santa Cruz, Solano, Sonoma, Sutter, and Yuba counties.	Inhabits saltwater, brackish, and freshwater marshes.	P	Unlikely. Small areas of marsh are present within the SPA, but these areas are not dense enough to support the species long-term. There are no CNDDB occurrences within a 5-mile radius of the SPA.
Purple martin <i>Progne subis</i>	--	SSC	Nests in northern Sacramento and Santa Clara Counties; uncommon or absent elsewhere in the Central Valley; breeds locally in coastal, foothill, and riparian areas from Del Norte County south to Santa Barbara County; rare in southern California.	Uses valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, and riparian habitats. Also occurs in coniferous habitats, including closed-cone pine-cypress, ponderosa pine, Douglas-fir, and redwood. Abandoned woodpecker holes and tree cavities in valley oak and cottonwood forests for nesting; also nests in vertical drainage holes under elevated freeways and highway bridges; open areas required for feeding.	P	Somewhat Likely. Suitable nesting and foraging habitat is present within the SPA. However, the species is well studied in the Sacramento area and has not been observed nesting within the SPA. There are three CNDDB occurrences of this species within a 5-mile radius of the SPA.

Table D-2. Special-status Wildlife with Potential to Occur in the Vicinity of the Project

Common Name Scientific Name	Legal Status ⁱ		Distribution	Habitat Requirements	Habitat Present/ Absent ⁱⁱ	Potential to Occur/Rationale ⁱⁱⁱ
	Federal	State				
Bank swallow <i>Riparia riparia</i>	--	ST	The state's largest remaining breeding populations are along the Sacramento River from Tehama County to Sacramento County and along the Feather and lower American Rivers, in the Owens Valley; nesting areas also include the plains east of the Cascade Range south through Lassen County, northern Siskiyou County, and small populations near the coast from SF County to Monterey County. Riparian and other lowland habitats in California west of the deserts during the spring-fall period.	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam to allow digging. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	A	Unlikely. Suitable nesting and foraging habitat is absent from the SPA. There are two CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT	SE	Breeds along major river valleys. Occurs at isolated sites in Sacramento Valley in northern California and along Kern and Colorado River systems in southern California. The northern limit of breeding in California is Sacramento Valley.	In California, prefers riparian woodlands comprised of various compositions with a dense understory along slow moving watercourses. Typically requires expansive riparian habitat of 25–99 acres of habitat for breeding. Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, and which abut on slow-moving watercourses, backwaters, or seeps. Willow almost always a dominant component of the vegetation.	A	Unlikely. Suitable nesting and foraging habitat is absent from the SPA. There is one CNDDDB occurrence of this species within a 5-mile radius of the SPA, but the occurrence was recorded in 1877.

Table D-2. Special-status Wildlife with Potential to Occur in the Vicinity of the Project

Common Name Scientific Name	Legal Status ⁱ		Distribution	Habitat Requirements	Habitat Present/ Absent ⁱⁱ	Potential to Occur/Rationale ⁱⁱⁱ
	Federal	State				
White-tailed kite <i>Elanus leucurus</i>	--	FP	Lowland areas west of Sierra Nevada from head of Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border. Central Valley and low foothills of Sierra Nevadas.	Agricultural lands and open stages of most herbaceous habitats. Nests in dense oak, willow, or other tree stands. Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	P	Likely. Suitable foraging and nesting habitat is present within the SPA. There are 13 CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Swainson's hawk <i>Buteo swainsoni</i>	--	ST	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley; the state's highest nesting densities occur near Davis and Woodland, Yolo County.	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Nests in oaks or cottonwoods in or near riparian habitats; forages in grasslands, irrigated pastures, and grain fields.	P	Likely. Suitable foraging and nesting habitat is present within the SPA. There are 17 CNDDDB occurrences of this species within a 5-mile radius of the SPA.
Song sparrow ("Modesto" population) <i>Melospiza melodia</i> <i>pop. 1</i>	--	SSC	Restricted to California, where it is locally numerous in the Sacramento Valley, Sacramento–San Joaquin River Delta, and northern San Joaquin Valley.	Occurs in tidal marsh in Suisun Bay. Dense vegetation is required for nesting sites, song perches, and cover for refuge from predators.	P	Unlikely. Marginally suitable habitat is present within the SPA, but dense riparian areas for nesting are not present. There is one CNDDDB occurrence of this species within a 5-mile radius of the SPA, but the occurrence was recorded in 1900.

Table D-2. Special-status Wildlife with Potential to Occur in the Vicinity of the Project

Common Name Scientific Name	Legal Status ⁱ		Distribution	Habitat Requirements	Habitat Present/ Absent ⁱⁱ	Potential to Occur/Rationale ⁱⁱⁱ
	Federal	State				
Least Bell's vireo <i>Vireo bellii pusillus</i>	FE	SE	Breeds from California -- where range has severely contracted from historic distribution in Tehama Co. -- south through Central Valley, coastal Santa Clara Co. to San Diego Co., and Owens Valley, Death Valley, and scattered oases in Mojave Desert to s. Nevada, uncommonly in Washington Co., sw. Utah -- especially Virgin River drainage and Beaver Dam Wash.	Wide variety of shrubs and small trees for habitat and nest-building; usually dense, low, shrubby vegetation characteristic of early successional stages in riparian areas, brushy fields, young second-growth forest or woodland, scrub oak, coastal chaparral, and mesquite brushlands.	A	Unlikely. Suitable habitat is not present within the SPA. There are no CNDDDB occurrences within a 5-mile radius of the SPA.
Mammals						
Pallid bat <i>Antrozous pallidus</i>	--	SSC	Throughout California except for the high Sierra Nevada from Shasta to Kern Counties, and the northwestern corner of the state from Del Norte and western Siskiyou counties to northern Mendocino County.	Grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. The species is most common in open, dry habitats with rocky areas for roosting. Roosts include crevices in rocky outcrops, cliffs, caves, mines, trees, and various human structures such as bridges, barns, and porches.	P	Unlikely. Although the SPA provides suitable habitat within large trees and weep holes under bridges the species is very sensitive to human disturbances and is unlikely to roost within the SPA due to the developed nature. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.
American badger <i>Taxidea taxus</i>	--	SSC	Occurs throughout California where habitat is present, except in northwestern coastal California.	Permanent resident of most uncultivated, open stage shrub, forest and herbaceous habitats with friable soils for digging burrows. Badgers feed primarily on fossorial species, such as burrowing mammals like pocket gophers and ground squirrels.	P	Somewhat Likely. The SPA provides marginally suitable habitat within the annual grassland habitat, though heavy urbanization lessens the quality of available habitat. There are no CNDDDB occurrences of this species within a 5-mile radius of the SPA.

ⁱ Status explanations:

-- = no listing

Federal

EX NE = Experimental Population, Non-essential

FC = Candidate for listing under the federal Endangered Species Act.

FD = Federally delisted.
FE = Listed as endangered under the federal Endangered Species Act.
FT = Listed as threatened under the federal Endangered Species Act.
PFT = Proposed for listing as threatened under the federal Endangered Species Act.

State

SCE = Candidate for listing as Endangered under the California Endangered Species Act.
SE = Listed as endangered under the California Endangered Species Act.
ST = Listed as threatened under the California Endangered Species Act.
FP = Designated as a fully protected species under the California Fish and Game Code.
SSC = CDFW species of special concern

ii Habitat Designations:

P = Suitable habitat was observed within the SPA during the windshield survey.
A = Suitable habitat was not observed within the SPA during the windshield survey

iii Rationale

Definitions for the Potential to Occur:

Unlikely: Suitable habitat was not observed during windshield survey.

Somewhat Likely: Marginally suitable habitat was observed during windshield survey.

Likely: Suitable habitat was observed during the windshield survey.

Known: Suitable habitat was observed during the windshield survey and there are known occurrences within the SPA.

Source: USFWS 2025, NMFS 2025, and CDFW 2025