MITIGATED NEGATIVE DECLARATION

Pursuant to Division 6, Title 14, Chapter 3, Article 6, Sections 15070 and 15071 of the California Administrative Code and pursuant to the Procedures for Preparation and Processing of Environmental Impact Reports adopted by the County of Sacramento pursuant to Sacramento County Ordinance No. SCC-116, the Environmental Coordinator of Sacramento County, State of California, does prepare, make, declare, publish, and cause to be filed with the County Clerk of Sacramento County, State of California, this Negative Declaration re: The Project described as follows:

1. **Control Number:** 2009-70005 and PLNP2009-APB-00051
2. **Title and Short Description of Project:** WESTERVELT WILLIAMSON ACT CONTRACT AMENDMENT AND GRADING PERMIT
   A grading permit for grading and other earthwork associated with the proposed habitat creation. Rescission of an existing Williamson Act contract to simultaneously enter into a new Williamson Act contract for property in the AG-80 zone for the purpose of allowing open space uses in addition to agricultural uses.
3. **Assessor's Parcel Number:** 146-0140-003, 004
4. **Location of Project:** The property is located at 7591 New Hope Road, on the north side of New Hope Road, at the terminus of New Hope Road and the Sacramento County line (San Joaquin County), in the Southeast community.
5. **Project Applicant:** Westervelt Ecological Services, LLC
6. Said project will not have a significant effect on the environment for the following reasons:
   a) It will not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.
   b) It will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.
   c) It will not have impacts, which are individually limited, but cumulatively considerable.
   d) It will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.
7. As a result thereof, the preparation of an environmental impact report pursuant to the Environmental Quality Act (Division 13 of the Public Resources Code of the State of California) is not required.
8. The attached Initial Study has been performed by the Sacramento County Department of Environmental Review and Assessment in support of this Negative Declaration. Further information may be obtained by contacting the Department of Environmental Review and Assessment at 827 Seventh Street, Room 220, Sacramento, California, 95814, or phone (916) 874-7914.

[Original Signature on File]
Joyce Horizumi
ENVIRONMENTAL COORDINATOR OF
SACRAMENTO COUNTY, STATE OF CALIFORNIA

COUNTY OF SACRAMENTO
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT

INITIAL STUDY

PROJECT INFORMATION

CONTROL NUMBER: 2009-70005 and PLNP2009-APB-00051

NAME: **WESTERVELT WILLIAMSON ACT CONTRACT AMENDMENT AND GRADING PERMIT**

LOCATION: The property is located at 7591 New Hope Road, on the north side of New Hope Road, at the terminus of New Hope Road and the Sacramento County line (San Joaquin County), in the Southeast community (Plate IS-1).

ASSESSOR'S PARCEL NUMBERS: 146-0140-003, 004

APPLICANT/OWNER:

Westervelt Ecological Services, LLC
Attn: Greg DeYoung

PROJECT DESCRIPTION

1. A grading permit for grading and other earthwork associated with the proposed habitat creation.

2. Rescission of an existing Williamson Act contract to simultaneously enter into a new Williamson Act contract for property in the AG-80 zone for the purpose of allowing open space uses in addition to agricultural uses.

ENVIRONMENTAL SETTING

The project is located in southern Sacramento County at the confluence of the Mokelumne and Cosumnes Rivers. The project site consists of two parcels totaling approximately 496 acres and is surrounded on the north by the Cosumnes River and property within the Cosumnes River Preserve, on the west by the Mokelumne River, on the east by Grizzly Slough, and on the south by New Hope Road (Plate IS-2 and Plate IS-3). The site consists of agricultural land with two dilapidated barns, an abandoned

house, expansive fields, and vineyards. Vegetation consists of grapevines and row crops. Oak and willow trees flank the site along the levees. A small stand of valley oaks is located in the southwestern portion of the site. Five abandoned natural gas wells are located throughout the site. Topography of the site is generally flat with elevation ranges from 5 to 10 feet from the southern portion of the site toward the northern portion.

The soils on the site are classified as Prime and the site is under an existing Williamson Act contract. Historical records indicate that the land has been used for agriculture since 1910. Historical crops produced on the site include vineyards, pumpkin, and corn. At present the site is not being used for agricultural production.

The site is zoned for Agriculture (AG-80) with a Flood (F) combining overlay zone. Plate IS-4 shows the existing zoning of the project site and vicinity. Adjacent uses are agricultural and conservation lands within the Cosumnes River Preserve. The site is protected by levees on the north, east, and west. Many irrigation and drainage ditches cross the property. There are two small wetlands located in the northeastern portion of the site.

The site is accessible from New Hope Road at its southern boundary by way of a gravel road that extends to the northernmost levee. A gravel road atop the levee provides access around the perimeter of the site.

ENVIRONMENTAL EFFECTS

See the Initial Study Checklist attached to this report and the following discussion.

LAND USE

The project consists of the creation of a mitigation bank, which includes breaching the levee on the Cosumnes River and restoring the site to a naturally sustained riparian and wetland habitat. According to the applicant:

> "Restoration of the site would be accomplished through a combination of active planting and natural process restoration following restoration of natural tidal and flood flows on the site. Re-exposure of the site to routine (e.g., annual) flood events and tidal action during riverine low-flow periods is planned to help restore wetland hydrology to the site promoting the natural-process restoration of bottomland riparian forest and scrub plant communities.
>
> The [restoration will occur] through construction of a levee breach on the Cosumnes River, excavation and re-establishment of tidally influenced channels, construction of low-floodplain benches adjacent to channels, construction of mounds to increase topographic complexity, and strategic planting of native riparian plant species.

Plate IS-1: Vicinity Map

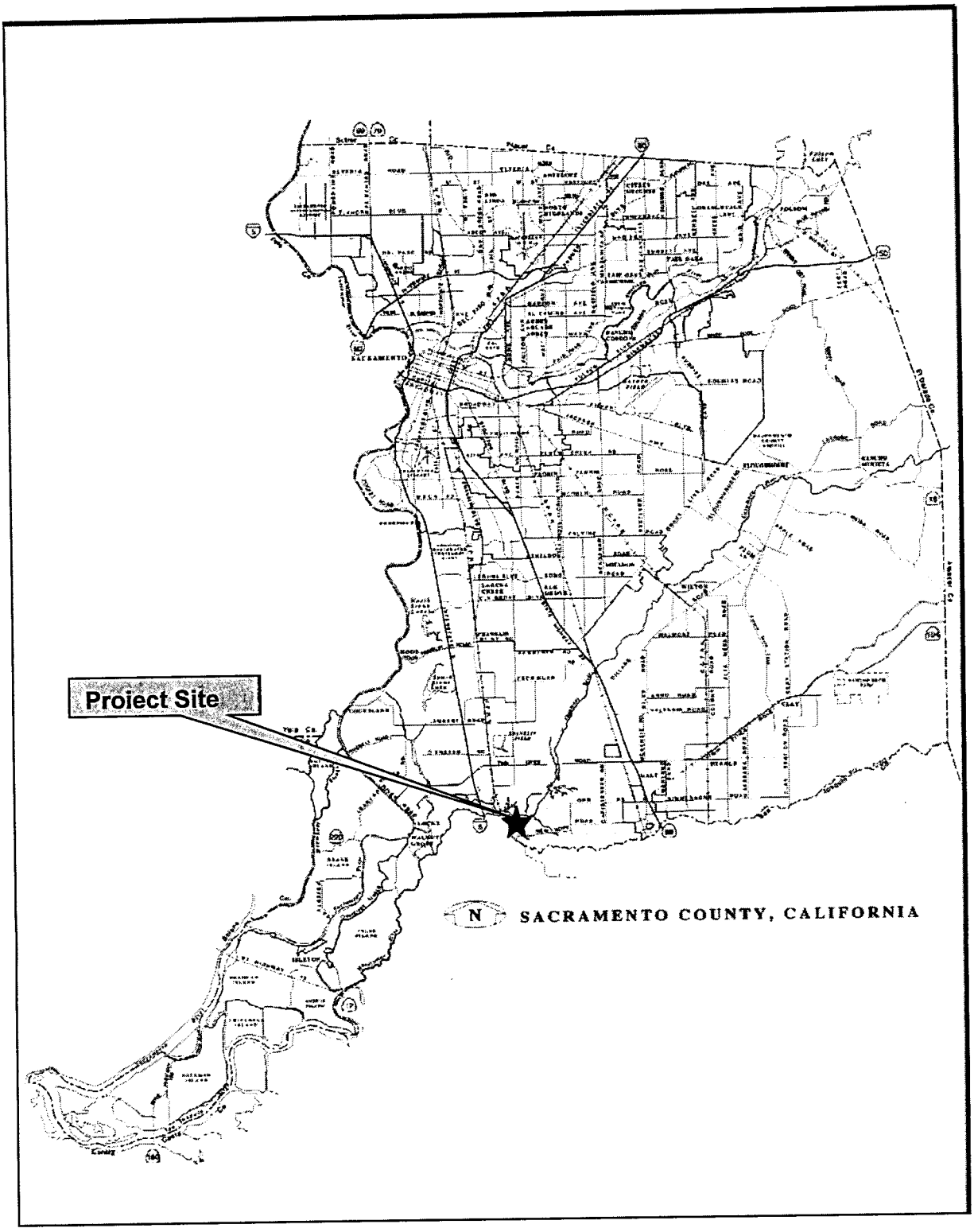


Plate IS-2: Project Site Aerial View

Plate IS-3: Project Site Location

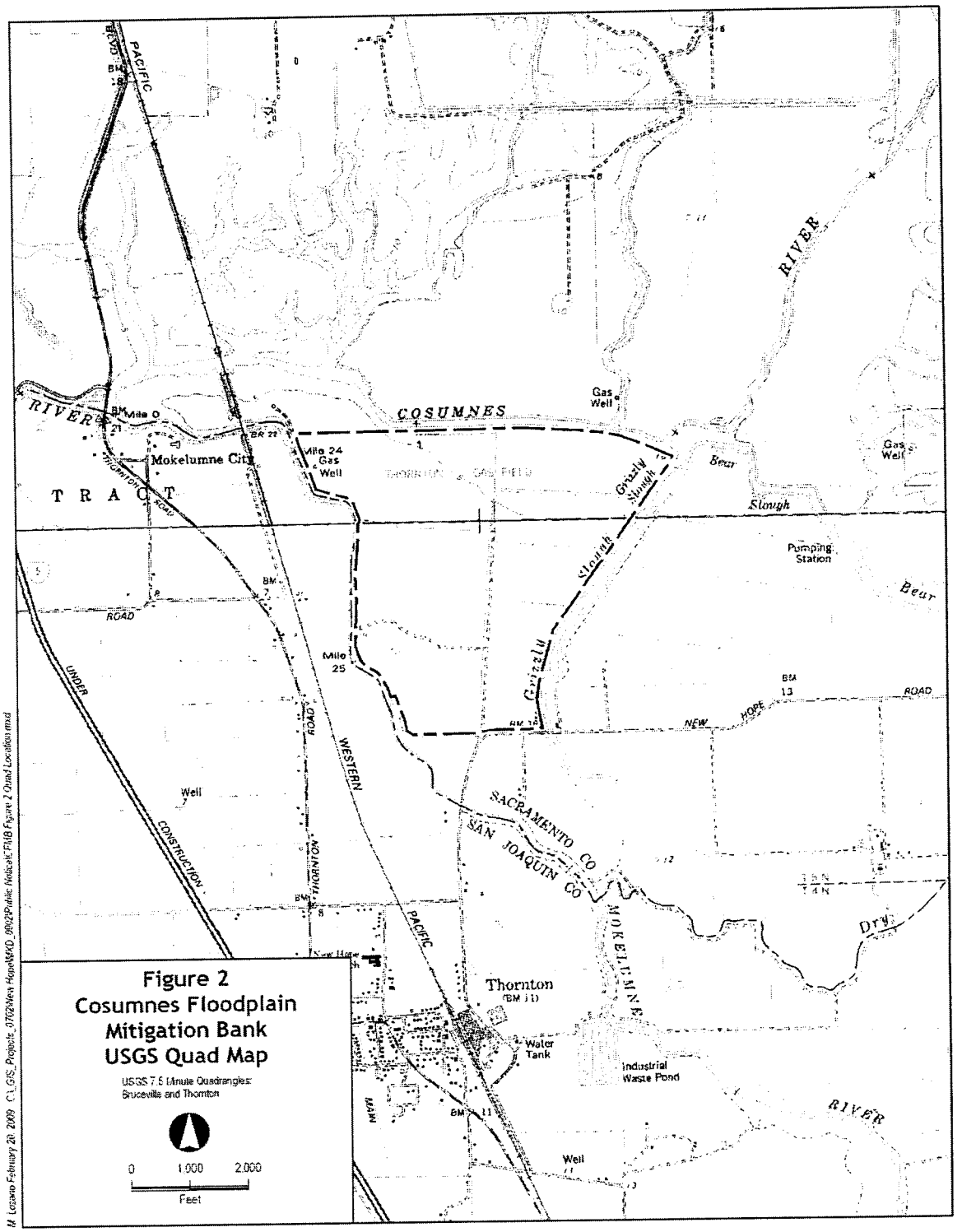
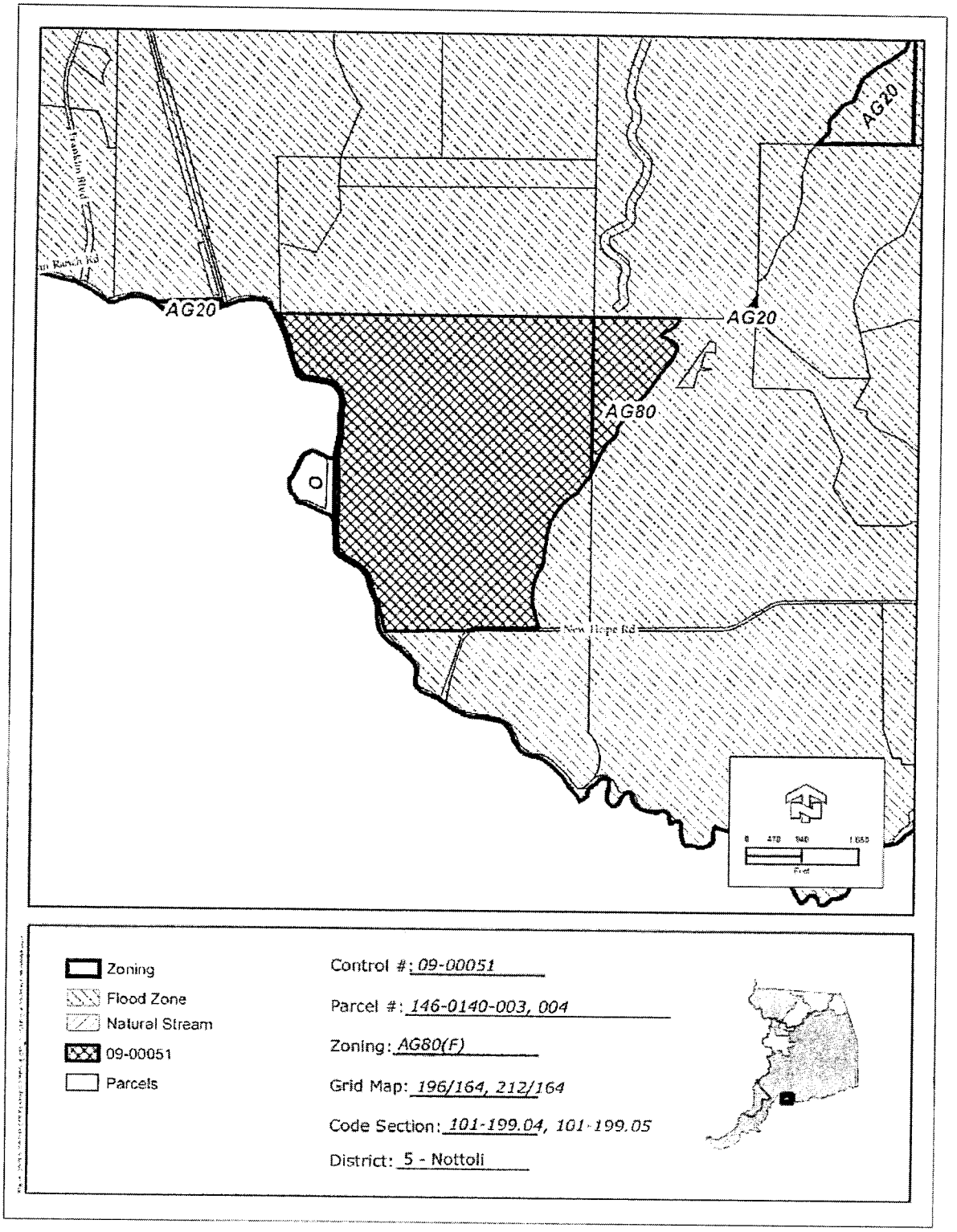


Plate IS-4: Zoning Map



> The proposed project will provide benefits to aquatic and terrestrial wildlife, floodplain ecological function, watershed-wide wetland services, and local flood capacity."

The channels will be constructed to allow for positive drainage back to the Cosumnes River during lower low water tide (the lower of the two daily low tides). To reduce the likelihood of flooding on neighboring parcels the project will construct a raised berm at the southern edge of the property. This berm will match the elevation of the existing farm berms surrounding the site. See Plate IS-5 and Plate IS-6 for site plan illustration.

The project is requesting a rescission of an existing Williamson Act contract to simultaneously enter into a new Williamson Act contract that allows for open space use.

The Sacramento County General Plan designation for the project site is Agricultural Cropland with adjacent Natural Preserve and a Resource Conservation Area combining use overlay. According to the General Plan:

> "The Agricultural Cropland designation represents agricultural lands most suitable for intensive agriculture. The agricultural activities included are row crops, tree crops, irrigated grains, and dairies. The designation is generally limited to areas where soils are rated from Class I to Class IV by the Soil Conservation Service, or are classified Prime, Statewide, or Unique significance by the State of California Conservation Department. These lands have at least some of the following attributes: deep to moderately deep soils, abundant to ample water supply, distinguishable geographic boundaries, absence of incompatible residential uses, absence of topographical constraints, good to excellent crop yields, and large to moderate sized farm units. These attributes indicate the need for ambitious preservation policies and techniques. The Agricultural Cropland designation allows single-family dwelling units at a density no greater than 40 acres per unit."
>
> "The purpose of the Natural Preserve designation is to identify critical natural habitat for priority resource protection. The designation includes riparian Valley Oak woodland and permanent or seasonal marshes with outstanding wildlife value, the extent of which has declined greatly throughout the Central Valley during the 20th Century. This designation shows Natural Preserve on both public and privately owned land. Preserve boundaries do not include intensively farmed areas."

Plate IS-5: Site Plan Illustration

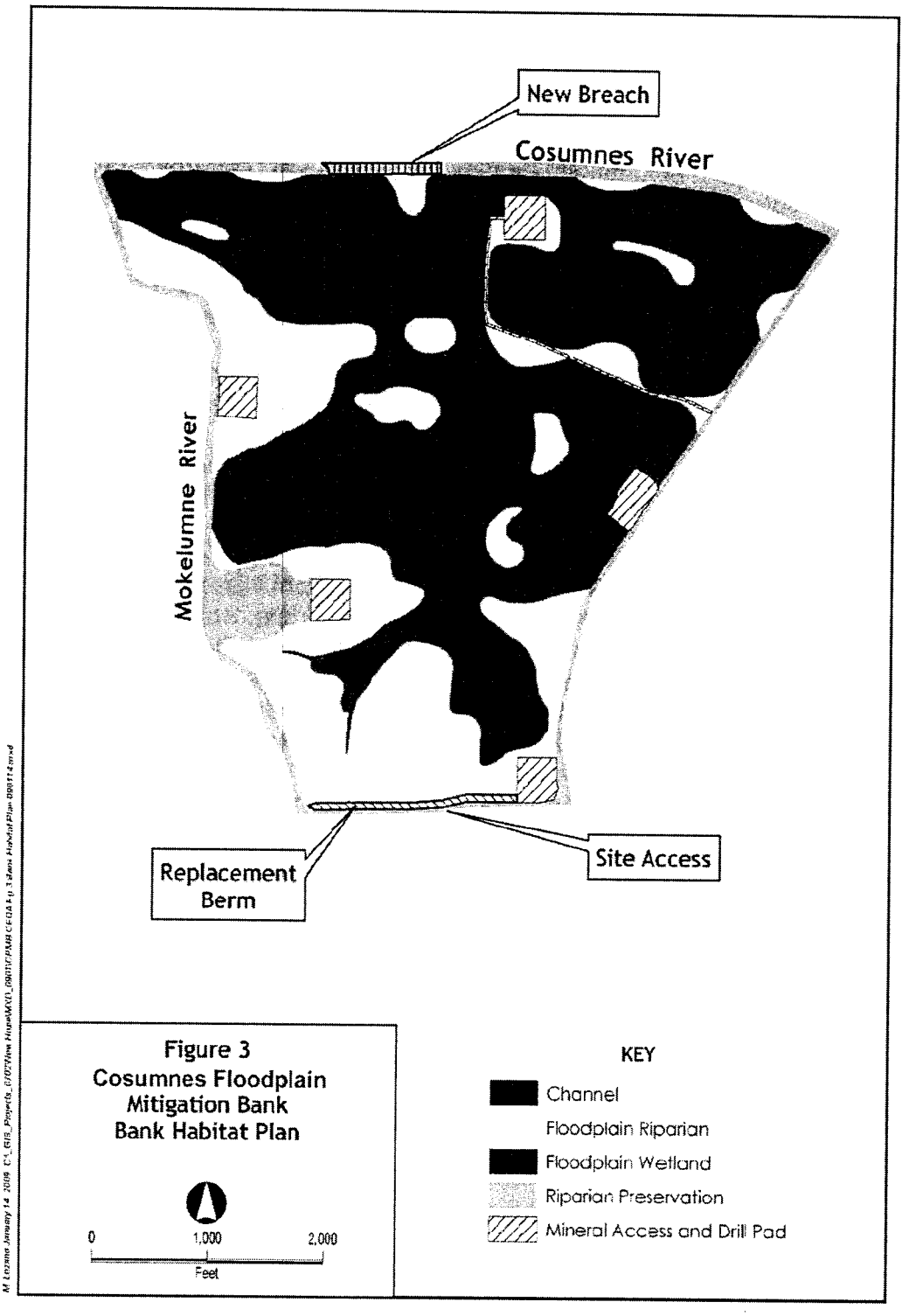
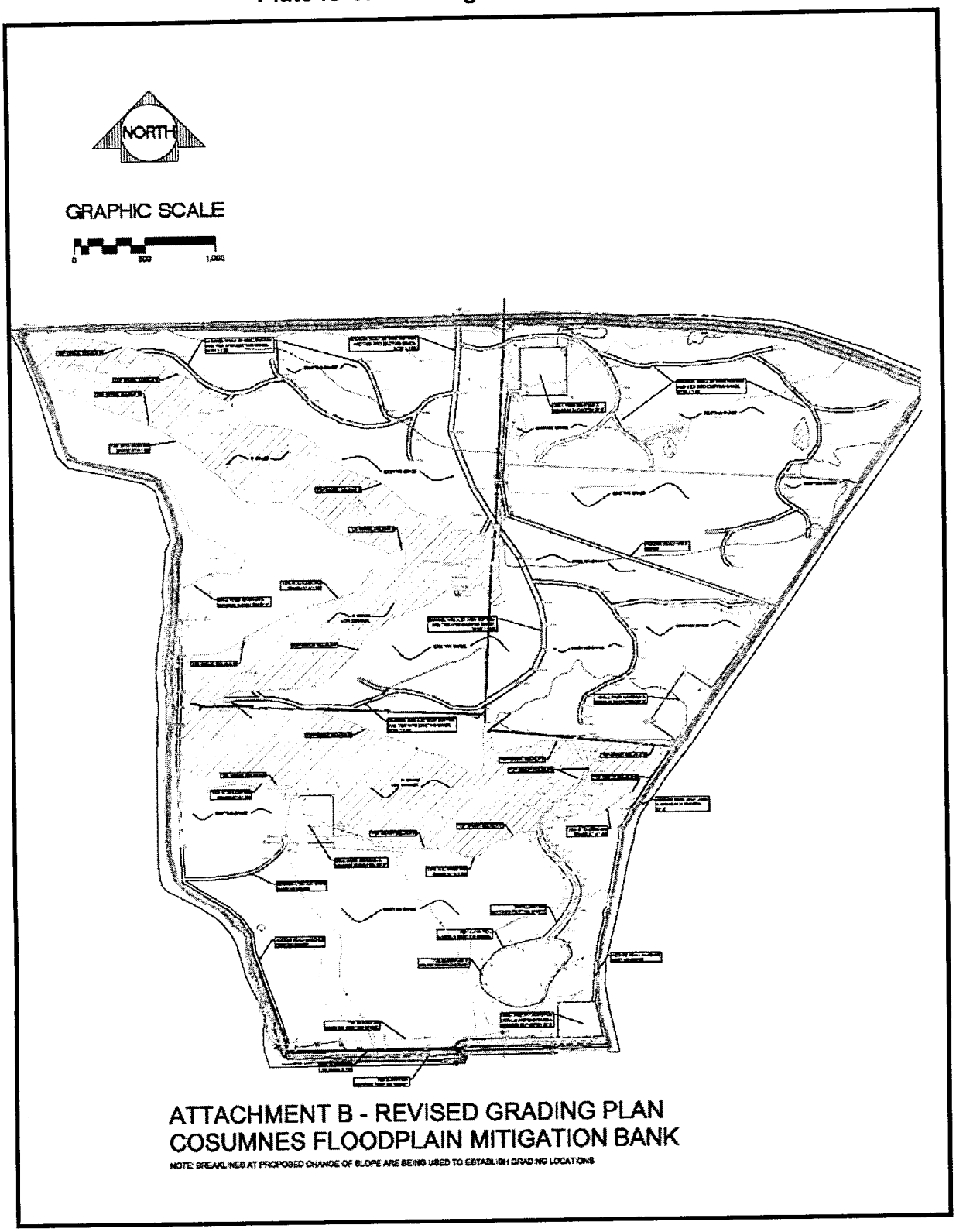


Plate IS-6: Grading Plan



"The purpose of the Resource Conservation combining designation is to identify areas with special resource management needs. The designation targets certain natural resources as being important on the Land Use Diagram while recognizing the validity of the underlying land use designation. The intent is to develop programs and incentives to assist land owners with resource protection and enhancement. Compliance with the Resource Conservation designation will rely on the voluntary support of landowners who seek cooperative conservation agreements with the County. The Resource Conservation combining land use category may be combined with Recreation, Natural Preserve, Agricultural-Cropland, General Agriculture/80 acre, and General Agriculture/20 acre Land Use Designations in suitable areas outside the Urban Service Boundary. Designated natural resource conservation areas on the Diagram may be somewhat generalized, and target resources may not exist on all property within the delineated area. Resource Conservation areas address vernal pools, wetland creation, waterfowl management, peat soil conservation, and Blue Oak woodland harvesting."

In addition, the project site is zoned AG-80 and the entire property is subject to the Flood (F) combining overlay zone. The Flood (F) combining overlay zone is intended to apply to all land covered by rivers, creeks, streams, and land subject to flooding within the unincorporated area of the County. Any development within such an area is required to comply with the provisions of the Sacramento County Water Agency Drainage (Floodplain Management) Ordinance, and regulations adopted pursuant thereto. Flooding issues are described further in the "Drainage and Flooding" section of this Initial Study.

According to the Zoning Code (SZC 205-01), the AG-80 and other Agricultural land use zones were established and designed to promote and protect the public health, safety and general welfare, and were adopted for the following purposes:

- To eliminate the encroachment of land uses which are incompatible with the long-term agricultural use of land;
- To preserve the maximum amount of the limited supply of agricultural land in order to conserve the County's economic resources which are vital for a healthy agricultural economy within the County;
- To discourage the premature and unnecessary conversion of agricultural land to urban uses, which will benefit the residents of urban areas and which will prevent unnecessary increases in the costs of providing community services to urban residents;
- To assure the preservation of agricultural lands which have a definite value as open space and for the production of agricultural products, so as to preserve an important physical, social, aesthetic and economic asset of the residents of the County; and
- To encourage the retention of sufficiently large agricultural lots to assure maintenance of viable agricultural units.

The project does not propose any change to the land use designation of the site and is consistent with Zoning Code and General Plan designations.

AGRICULTURAL SUITABILITY

PRIME FARMLAND

The Soil Survey of Sacramento County, California, (1993) issued by the USDA Soil Conservation Service indicates that entire project site contains soils identified as being Prime farmland (Clear Lake clay, partially drained, 0 to 2 percent slopes, frequently drained, Columbia sandy loam, drained, 0 to 2 percent slopes, Columbia sandy loam, clayey substratum, drained, 0 to 2 percent slopes, Cosumnes silt loam, drained, 0 to 2 percent slopes, and Dierssen clay loam, deep, drained, 0 to 2 percent slopes (see Plate IS-7). The project site is also designated as Prime Farmland under the California Department of Conservation (DOC); Division of Land Resource Protection's map entitled Sacramento County Important Farmland, 2008.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, and fiber and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season, or is protected from flooding. Slope ranges mainly from 0 to 6 percent. For some of the soils identified as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and drought are needed. Specifically, the soils of the project site are limited mainly by the depth of a seasonal high water table which generally limits the suitability for deep-rooted crops.

The project site is considered prime farmland. It has historically been planted with a variety of irrigated row crops vineyards, pumpkin, and corn.

GENERAL PLAN POLICIES

The General Plan Agricultural Element has policies intended to regulate farmland uses. The following General Plan Agricultural Element and Conservation Element policies are pertinent to the proposed project:

Policy CO-55 Projects resulting in the conversion of more than fifty (50) acres of prime or statewide in importance farmland shall be deemed to have a significant environmental effect, as defined by CEQA.

Policy AG-19 County encourages the preservation of prime agricultural land as open space, including opposing any residential or commercial development for the Cosumnes River or Deer Creek riparian areas which is not compatible with agricultural use.

The project is consistent with Policy AG-19 and Policy CO-55. Policy CO-55 sets a significance threshold of fifty (50) acres for loss of prime or statewide importance farmland. According to the Sacramento County Department of Planning and Community Development (R. Sherry), the project is located on prime farmland but is not expected to convert prime farmland to non-agricultural use as the project does not preclude agricultural practices and, further, proposes continued agricultural practices in the form of grazing as a component of the mitigation banking operation.

The proposed project is not expected to result in a loss of agricultural viability or agricultural production on the project site.

WILLIAMSON ACT

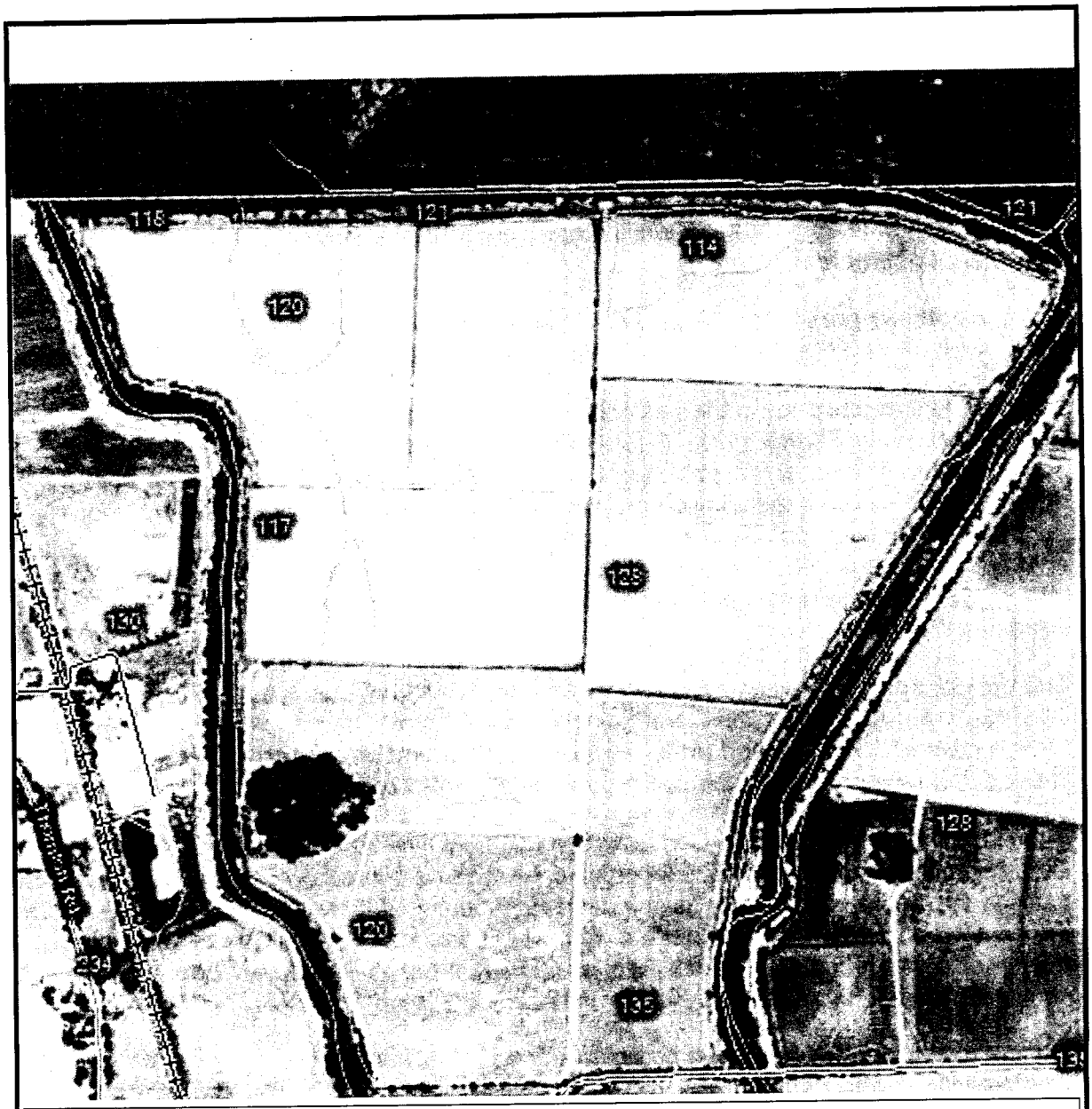
The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) serves to preserve open spaces and agricultural land. The Williamson Act is a State program that allows agricultural landowners to pay reduced property taxes in return for their contractual agreement to retain the land in agricultural and open space uses for a period of 10 years. The legal contract is between the landowner and the County. The contract is automatically renewed each year for an additional year, unless a notice of non-renewal is filed or the contract is cancelled. Under the non-renewal process, the annual tax assessment gradually increases, and after 9 years the contract is terminated. Cancellation (immediate termination) of a contract is reserved for extraordinary situations; opportunities for another use of the property, or the uneconomic character of the existing agricultural use, are not sufficient reasons for contract cancellation. The landowner must pay a fee equal to 12.5% of the unrestricted current fair market value of the property if a contract is cancelled.

The intent of the Williamson Act is set forth in Government Code Section 51220 as follows:

a) That the preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state's economic resources, and is necessary not only to the maintenance of the agricultural economy of the state, but also for the assurance of adequate, healthful and nutritious food for future residents of this state and nation.

b) That the discouragement of premature and unnecessary conversion of agricultural land to urban uses is a matter of public interest and will be of benefit to urban development patterns which unnecessarily increase the costs of community services to community residents.

Plate IS-7: Soils Map



LEGEND

Unit Number	Description
114	Clear Lake clay, partially drained, 0 to 2 percent slopes, frequently flooded
117	Columbia sandy loam, drained, 0 to 2 percent slopes
120	Columbia sandy loam, clayey substratum, drained, 0 to 2 percent slopes
128	Cosumnes silt loam, drained, 0 to 2 percent slopes
135	Dierssen clay loam, deep, drained, 0 to 2 percent slopes

c) That in a rapidly urbanizing society agricultural lands have a definite public value as open space, and the preservation in agricultural production of such lands, the use of which may be limited under the provision of this chapter, constitutes an important physical, social, aesthetic and economic asset to existing or pending urban or metropolitan developments.

d) That land within a scenic highway corridor or wildlife habitat area as defined in this chapter has a value to the state because of its scenic beauty and its location adjacent to or within view of a state scenic highway or because it is of great importance as habitat for wildlife and contributes to the preservation or enhancement thereof.

e) For these reasons, this chapter is necessary for the promotion of the general welfare and the protection of the public interest in agricultural land.

The project site has been under a Williamson Act contract with the County for over 30 years (Resolution/Contract No: 78-AP-033), and the contract is still active. The contract specifies that the property is to be zoned AG-80 and it lists the permitted agricultural and compatible land uses allowed on the site (see Appendix A). Because the existing contract specifically excludes open space uses, the applicant is requesting an entitlement to rescind the existing Williamson Act contract while simultaneously entering into a new Williamson act contract which allows open space use in addition to agricultural use.

The project application was reviewed by the Sacramento County Agricultural Commissioner (F. Carl). The Commissioner stated that " the application makes sense for this parcel. It is in a flood area, adjacent to preservation property. Cattle grazing with habitat mitigation are a natural mix of uses in this area."

The California Department of Conservation (DOC), Division of Land Resource Protection, is the State agency responsible for the interpretation of the Williamson Act and the enforcement of its provisions and restrictions. DOC staff (D. Otis) has reviewed the proposed project and provided the following comments: "The County [can] approve this rescission and re-entry under Section 51254, into a Williamson Act open space contract for uses as defined by Section 51201(j), (l), (o)(2), or (o)(4)."

Once the new contact has been completed the project will not be in conflict with any existing Williamson Act contract. Impacts are considered less than significant.

DELTA PROTECTION ACT

The Johnston-Baker-Andal-Boatwright Delta Protection Act of 1992 (Senate Bill 1866) was approved by the Governor on September 23, 1992. The Act recognizes that the Sacramento-San Joaquin Delta is a "natural resource of statewide, national, and international significance, containing irreplaceable resources, and it is the policy of the State to recognize, preserve, and protect those resources of the Delta for the use and enjoyment of current and future generations". The legislation requires the

establishment of a Delta Protection Commission and requires the Commission to prepare and adopt a comprehensive long-term resource management plan for the Delta "which meets specified requirement plans for the primary zone". The "primary zone" is defined as "the Delta land and water area of primary state concern and statewide significance which is situated within the boundaries of the Delta, as described in Section 12220 of the Water Code, but which is not within either the urban limit line or sphere of influence of any local government's general plan or currently existing studies, as of January 1, 1992". As shown on Plate IS-8, the project site is situated within the secondary zone of the Delta.

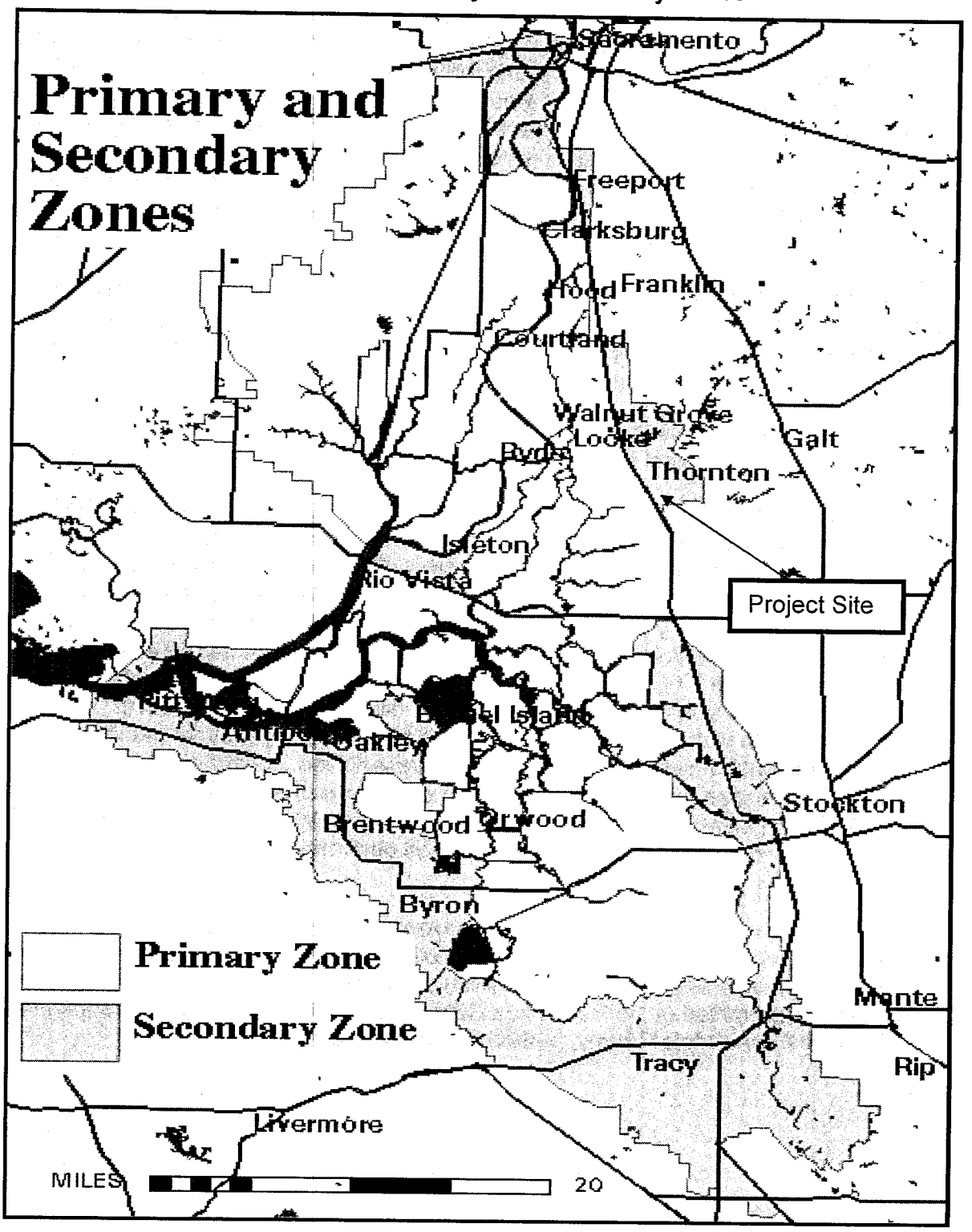
The Delta Protection Commission adopted the Land Use and Resource Management Plan for the Primary Zone of the Delta in February 1995. It was subsequently adopted by the Sacramento County Board of Supervisors on May 23, 1996 and made a part of the Sacramento County General Plan.

Any new development within the defined primary zone area, not authorized prior to January 1, 1992, is subject to the provisions of the Act. Development is defined as:

> "29723. (a) "Development" means on, in, over, or under land or water, the placement or erection of any solid material or structure; discharge of any dredged material or any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including but not limited to, subdivisions pursuant to the Subdivision Map Act (Division 2 commencing with Section 66410 of Title 7 of the Government Code), and any other division of land including lot splits, except where the land division is brought about in connection with the purchase of the land by a public agency for public recreational or fish and wildlife uses or preservation; construction, reconstruction, demolition or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting or major vegetation other than for agricultural purposes."

The Act further indicates that Delta "development" does not include farming or ranching activities or construction, reconstruction, demolition, and land divisions within existing zoning entitlements and development within, or adjacent to, the unincorporated towns of the Delta, as permitted in the Delta Area Community Plan of Sacramento County and the General Plan of Yolo County, authorized prior to January 1, 1992.

Plate IS-8: Delta Primary and Secondary Zones



The project proposes grading within the secondary zone of the Delta. Policy R-5 of the Land Use and Management Plan for the Primary Zone states the following:

> "To the extent possible, any development in the Secondary Zone should include an appropriate buffer zone to prevent impacts of such development on the lands in the Primary Zone. Local governments should consider needs of agriculture in determining such a buffer."

The project will return the site to a naturally sustained riparian and wetland habitat, which in itself should act as a buffer to impacts to the Primary Zone. Therefore, the proposed project appears to be generally consistent with the Delta Protection Act.

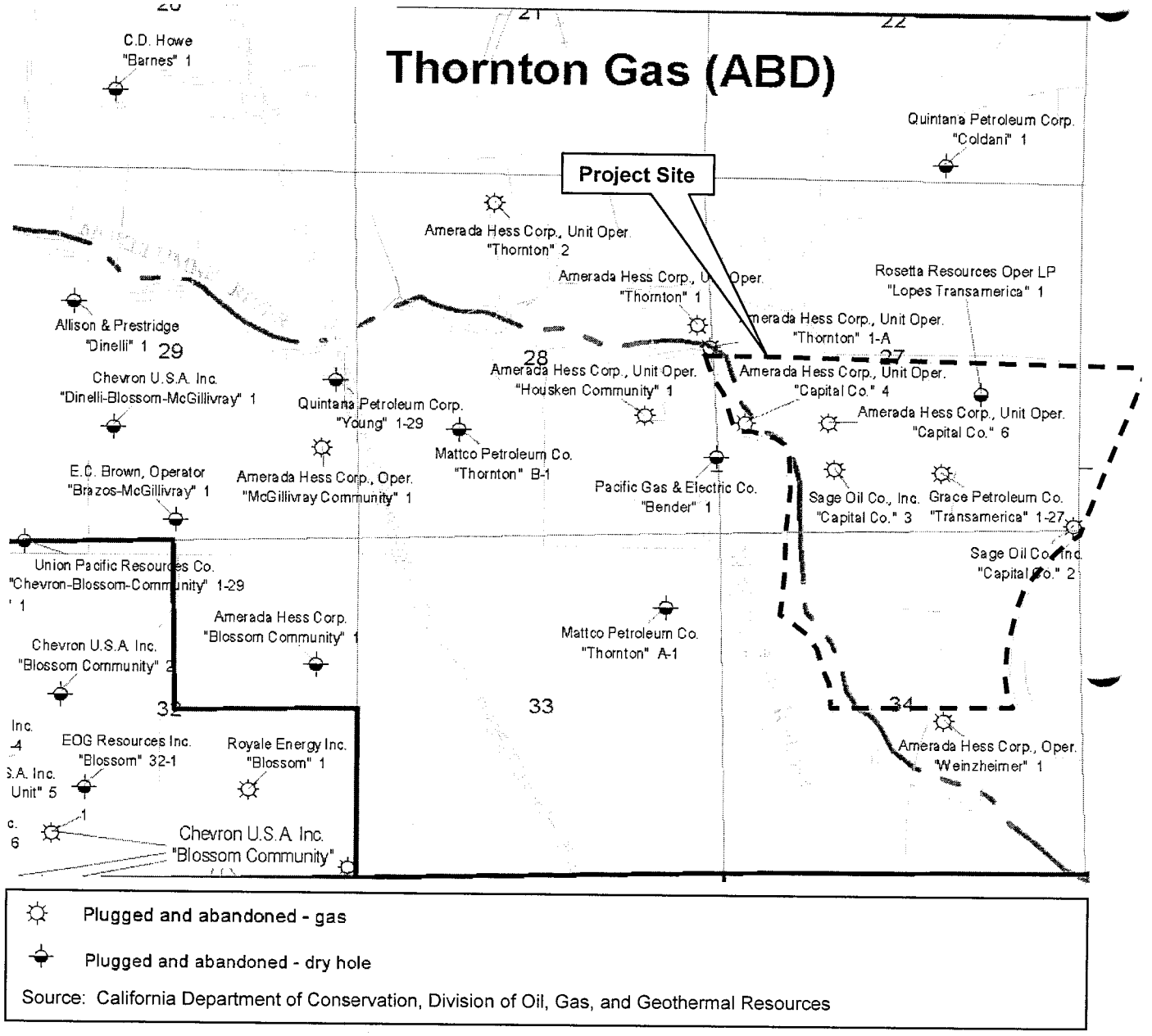
LAND USE CONCLUSION

The proposed project would not result in the loss of Prime farmland, is consistent with policies intended to preserve agricultural lands and open space, and is compatible with the intentions of the Delta Protection Act and the Williamson Act. The project does not appear to conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect nor does the project divide an established community. No significant environmental impacts related to land use or agricultural sustainability are expected.

NATURAL GAS WELLS

A Phase I Environmental Site Assessment was prepared for the project by ENGEO Incorporated (Appendix B). The report stated that according to the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), five abandoned gas wells are located on the project site. These wells are illustrated on Plate IS-9 of this document. According to the report these wells were abandoned during the 1970s by placing grout to approximately six feet below the ground surface. Though it is common for these types of gas wells to produce hydrocarbons, none were observed on the ground surface during ENGEO's site evaluation. ENGEO recommends that further soil and groundwater investigation be completed if soil movement is to occur within the vicinity of the wells.

Plate IS-9: Abandoned Gas Wells



Construction around abandoned oil and gas wells is subject to DOGGR requirements. According to the DOGGR, the following must be done by the local agency issuing the building or grading permit.

> "The local permitting agency checks the construction site plan against Division maps to determine if any abandoned wells are located within or adjacent to the indicated property boundaries. If a well appears to be located within this area, the applicant should be directed by the local permitting agency to provide materials specified by the Construction Site Plan Review program to the Division to initiate the review process. A local permitting agency may alternatively obtain site plans, vicinity maps, and other pertinent information from the applicant and provide that information to the Division for review.
>
> As part of a construction project where oil or gas wells existed, it is a requirement that the applicant locates the wellheads, uncover them, and call the Division to perform a gas test and visual inspection.
>
> Any reabandonment responsibilities of the developer/landowner of a property upon which construction will be located need extend no further than the property boundaries. Public Resources Code (PRC) Sec. 3208.1 authorizes the reabandonment of any well that was plugged and abandoned previously if the Supervisor or District Deputy has reason to question the integrity of the previous plugging and abandonment.
>
> The Division suggests that a diligent effort be made to avoid building over any plugged and abandoned well. If construction over an abandoned well is unavoidable, an adequate gas venting system should be placed over the well."

No impacts related to gas wells are expected when the aforementioned construction standards of the DOGGR are implemented.

AIR QUALITY

BACKGROUND

The geography and weather patterns of the Sacramento Valley are conducive to high air pollution levels. The mountain ranges surrounding the valley are natural air current barriers, which restrict most of the circulating winds of lower elevations from mixing and dispersing air pollutants of the valley. Sacramento is also subject to thermal air inversions, especially during the summer and fall months, wherein a layer of cool air is overlain by warmer air. Also, solar radiation from the abundant sunshine in Sacramento acts as a catalyst to drive chemical reactions between atmospheric pollutants such as reactive hydrocarbons and nitrogen oxides; the result is photochemical smog. Thus, the combination of surrounding mountains, abundant sunshine, thermal air inversions and wind patterns make the Sacramento area susceptible to high levels of air pollution.

Sacramento County is within the Sacramento Valley Air Basin (SVAB). Sacramento County is in attainment for all National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), with two exceptions: ozone and particulate matter (PM). Sacramento County is designated "serious" non-attainment for the federal eight-hour and the state one-hour ambient air quality standard for ozone. Under the CAAQS, Sacramento County is designated as non-attainment for both particulate matter 10 microns in diameter (PM_{10}) and particulate matter 2.5 microns in diameter ($PM_{2.5}$). Under the NAAQS, Sacramento County is designated as non-attainment for PM_{10} and attainment for $PM_{2.5}$.

Within the SVAB, the Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for ensuring that emission standards are not violated. Project related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation. Moreover, SMAQMD has established significance thresholds to determine if a proposed project's emission contribution significantly contributes to regional air quality impacts (refer to Table IS-1).

Table IS-1: Ozone Precursors – Significance Thresholds

	ROG[1] (lbs/day)	NOx (lbs/day)	CO ($\mu g/m^3$)	PM_{10} ($\mu g/m^3$)
Construction (short-term)	None	85	CAAQS[2]	CAAQS
Operational (long-term)	65	65	CAAQS	CAAQS

1. Reactive Organic Gas
2. California Ambient Air Quality Standards

The sources of emissions for this project would be from short-term (construction) pollution due to site grading. The short-term (construction) impacts are discussed below.

SHORT-TERM (CONSTRUCTION) IMPACTS

Short-term air quality impacts are mostly due to dust (PM_{10}) generated by construction and development activities, and emissions from equipment and vehicle engines (NOx) operated during these activities. Dust generation is dependent on soil type and soil moisture, as well as the amount of total acreage actually involved in clearing, grubbing and grading activities. Clearing and earthmoving activities comprise the major source of construction dust generation, but traffic and general disturbance of the soil also contribute to the problem. Sand, lime or other fine particulate materials may be used during construction, and stored on-site. If not stored properly, such materials could become airborne during periods of high winds. The effects of construction activities include increased dust fall and locally elevated levels of suspended particulates. PM_{10} is considered unhealthy because the particles are small enough to inhale and damage lung tissue, which can lead to respiratory problems.

The SMAQMD "Guide to Air Quality Assessment in Sacramento County" (July 2004, as amended, hereinafter called the SMAQMD Guide) contains screening thresholds for significant impacts. Some PM_{10} emissions during project construction can be reduced through compliance with institutional requirements for dust abatement and erosion control. These institutional measures include the SMAQMD "District Rule 403-Fugitive Dust", in the Sacramento County Code relating to land grading and erosion control [Title 16, Chapter 16.44, Section 16.44.090(K)]. The SMAQMD Guide indicates that construction projects involving less than 5 acres of graded area *at any one time* will not result in significant impacts related to particulate matter generation, and that impacts of projects with more than 5 but less than 15 acres of active grading can be reduced through standard mitigation. The text is emphasized to note that the screening threshold does not speak to the total project area, but to the largest total area that will be actively graded at any given time.

Although the project site is approximately 496 acres, the entire acreage will not be actively graded. Unless a site is quite small, a contractor typically hires enough equipment to actively grade a portion of the site each day, rather than contracting for enough equipment to grade the entire site during the same day. It is anticipated that no more than 10 acres will be graded in any one day. Level III mitigation is applied to projects involving 5 to 15 acres of active grading.

Construction of the mitigation bank is expected to occur in two phases: the first beginning in July 2009 and ending October 2009 and the second beginning in July 2010 and ending in October 2010. The applicant indicated that the following equipment will operate 8 hours per day during both phases:

- 2 excavators (each 168 horsepower (hp)),
- 2 graders (each 174 hp),
- 2 dozers (each 357 hp),
- 2 scrapers (each 313 hp), and
- 1 water truck (189 hp).

The Urban Emissions Model (URBEMIS) version 9.2.4 was used to model project emissions. The defaults were adjusted to reflect the equipment listed above. The results are shown in Table IS-2 below.

Table IS-2: URBEMIS Results – Construction Phase NO_x

Season One (2009)	103.2 lbs/day
Season Two (2010)	97.2 lbs/day

As shown in the above table, the project will exceed the NOx significance threshold in both the first and second construction seasons. For projects that exceed the threshold, SMAQMD recommends implementation of a standard construction mitigation measure that will reduce heavy-duty off-road diesel powered equipment emissions by 20% for

NOx and by 45% for particulates, as compared with the most recent California Air Resources Board (CARB) fleet average, and that also limits the opacity of visible exhaust emissions.

Table IS-3 shows the emission estimates with the application of the standard construction measures. As shown in the table, with mitigation, emissions would be less than 85 pounds per day in both seasons.

Table IS-3: Construction Phase NO_x with Mitigation

Season One (2009)	83.08 lbs/day
Season Two (2010)	78.19 lbs/day

With mitigation, potentially significant impacts related to construction emissions will be reduced to less than significant.

OPERATIONAL EMISSIONS/LONG-TERM IMPACTS

Once a project is completed, additional pollutants are emitted through the use, or operation, of the site. As an example, a new residential development will emit pollutants from fireplaces, the use of lawnmowers, and primarily from the cars of the new homeowners.

Ultimately, a project must have large acreages or intense uses in order to result in significant operational air quality impacts – the screening table in the SMAQMD Guide includes a minimum of over 600 new homes or hundreds of thousands of square feet of commercial use (depending on the type of use). Once completed, the proposed project will not result in new homes or additional trips. Impacts related to operational emissions are considered less than significant.

DRAINAGE AND FLOODING

The Cosumnes and Mokelumne Rivers form the northern and western boundaries of the site respectively. These rivers are both tidally influenced and therefore could be considered Traditional Navigable Waterways. The flows on the Mokelumne River are currently controlled and regulated by releases from Camanche Dam operated by East Bay Municipal Utility District (EBMUD). The Cosumnes River is currently unregulated and is the only remaining western Sierra Nevada river that still has a hydrograph largely similar to pre-settlement conditions[1]. Peak flows and runoff in the Cosumnes River still routinely flood the Cosumnes River Preserve, providing abundant wetland services for dependant wildlife. The project site has been protected by levees since the late 1800s

[1] Booth, Eric, Jeffrey Mount, and Joshua Viers. Hydrologic Variability of the Cosumnes River Floodplain. San Francisco Estuary and Watershed Science. Vol. 4. Issue 2 [September 2006]. Article 2.

and has not been exposed to the natural flood regime of these rivers or by the daily ebb and flow of the tide for over 100 years[2].

The project site is protected by levees on the north, east, and west; however, these levees do not provide 100-year level of flood protection to the site. The entire project site is designated on the FEMA (Federal Emergency Management Agency) Flood Insurance Rate Map (FIRM) as Flood Zone A, which is an area of 100-year flooding where base flood elevations (BFE's) have not been determined (Plate IS-10). The Flood (F) combining overlay zone covers the entire property. The project was reviewed by the Sacramento County Department of Water Resources (DWR) staff (M. Johnson). Staff indicated that the 100-year water surface elevation on the site is 24 feet. Elevations on the site generally range from 3 feet to 10 feet, though the elevation at the southern portion of the site, which borders New Hope Road, and along the levees averages 16 feet. The site has historically flooded, on average, every two years.

DELTA LEVEE TYPES AND RECLAMATION DISTRICTS

Extensive reclamation of the Delta began in the late 1800s. Levees were constructed to provide flood control and to allow draining of the low-lying lands for agriculture, and the Delta area subsequently became one of the most agriculturally productive regions in the State. Delta levees were originally built by individual landowners; later, reclamation districts were formed which allowed the landowners in an area to assess themselves to build and maintain levees to benefit the group as a whole. Most of the Delta levees were constructed from available materials dredged from low-lying edges of islands, or adjacent channels, and they were constructed without engineered designs. These levees were not built to a common standard and are called "non-project levees" or "local levees".

In contrast, "project levees" or "federal levees" consist of flood control levees that have been designed and built by the U.S. Army Corps of Engineers (Corps) to uniform standards, or locally constructed levees (reconstructed by the Corps if needed to achieve uniform standards) that have been adopted as federal levees, and that are maintained by the State Department of Water Resources or other local agencies. Plate IS-11 shows the location of project levees along the Sacramento River and its tributaries within Sacramento County.

The Cosumnes River levee and the Grizzly Slough levee are considered non-project or local levees. The Mokelumne River levee is also a non-project or local levee. As shown on Plate IS-12, this levee is in San Joaquin County within Reclamation District 348.

---

[2] Philip Williams & Associates. 2004. Compiled Technical Memoranda for the Grizzly Slough Project. Sacramento, CA.

Plate IS-10: FEMA Flood Map

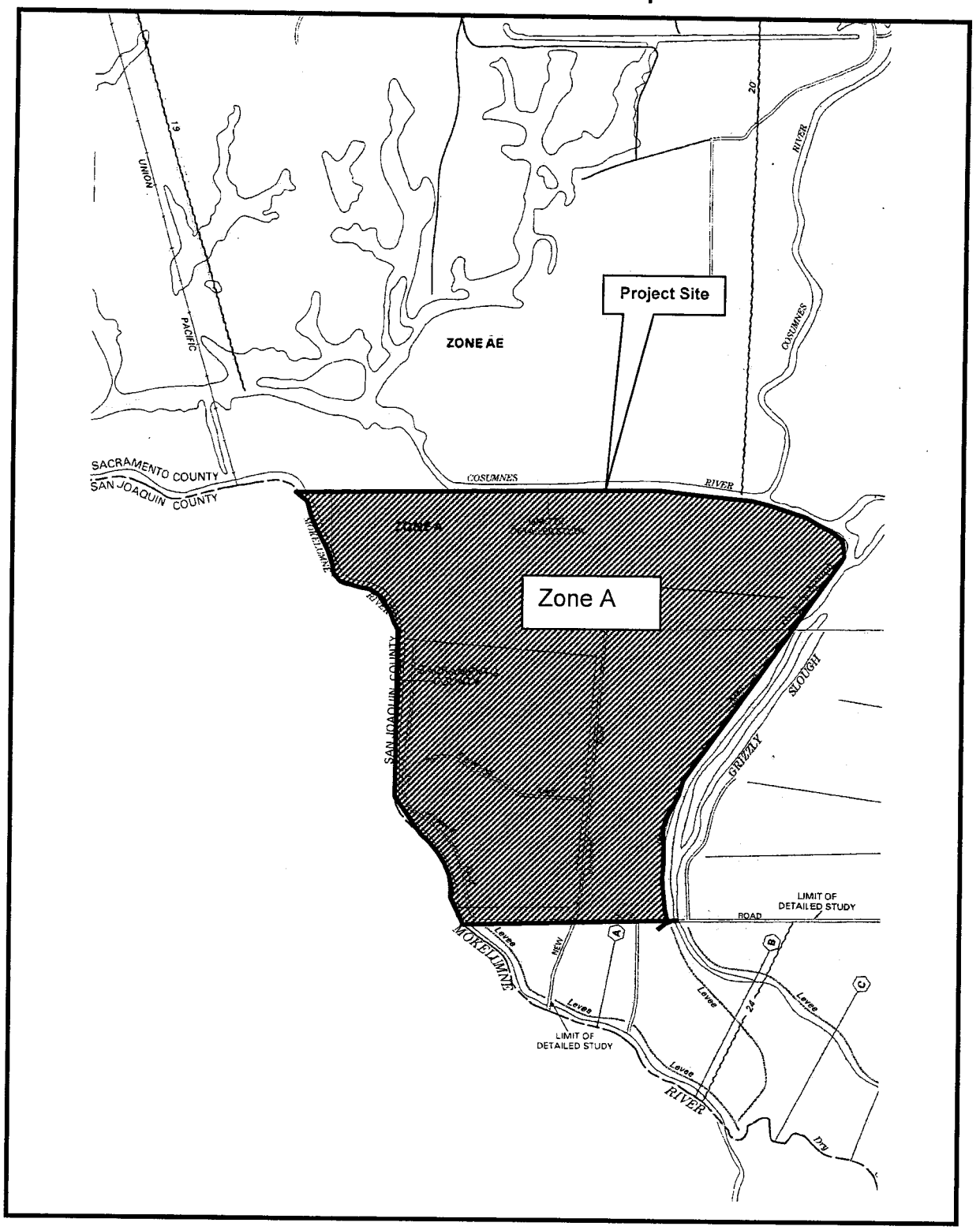


Plate IS-11: Project Levees

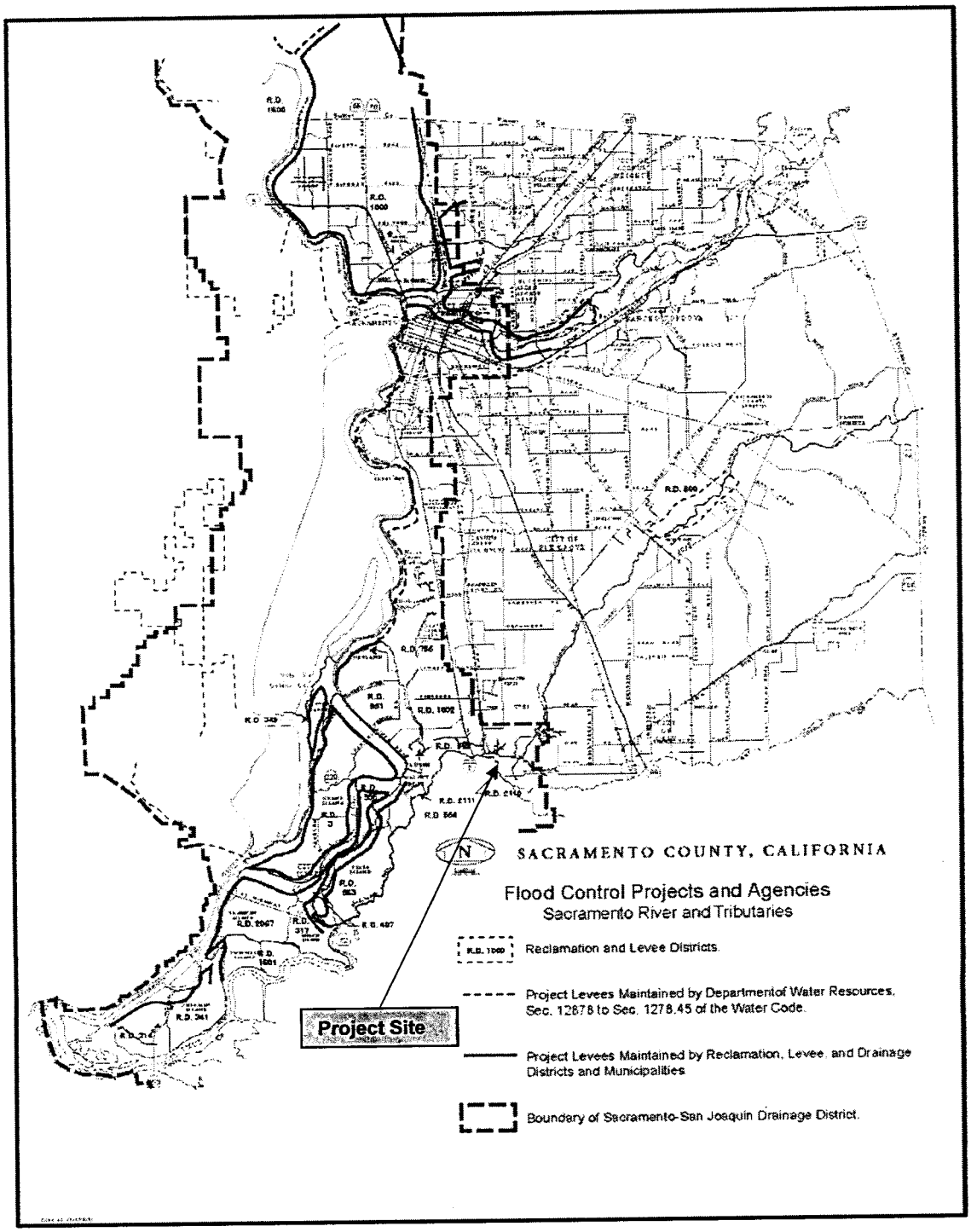
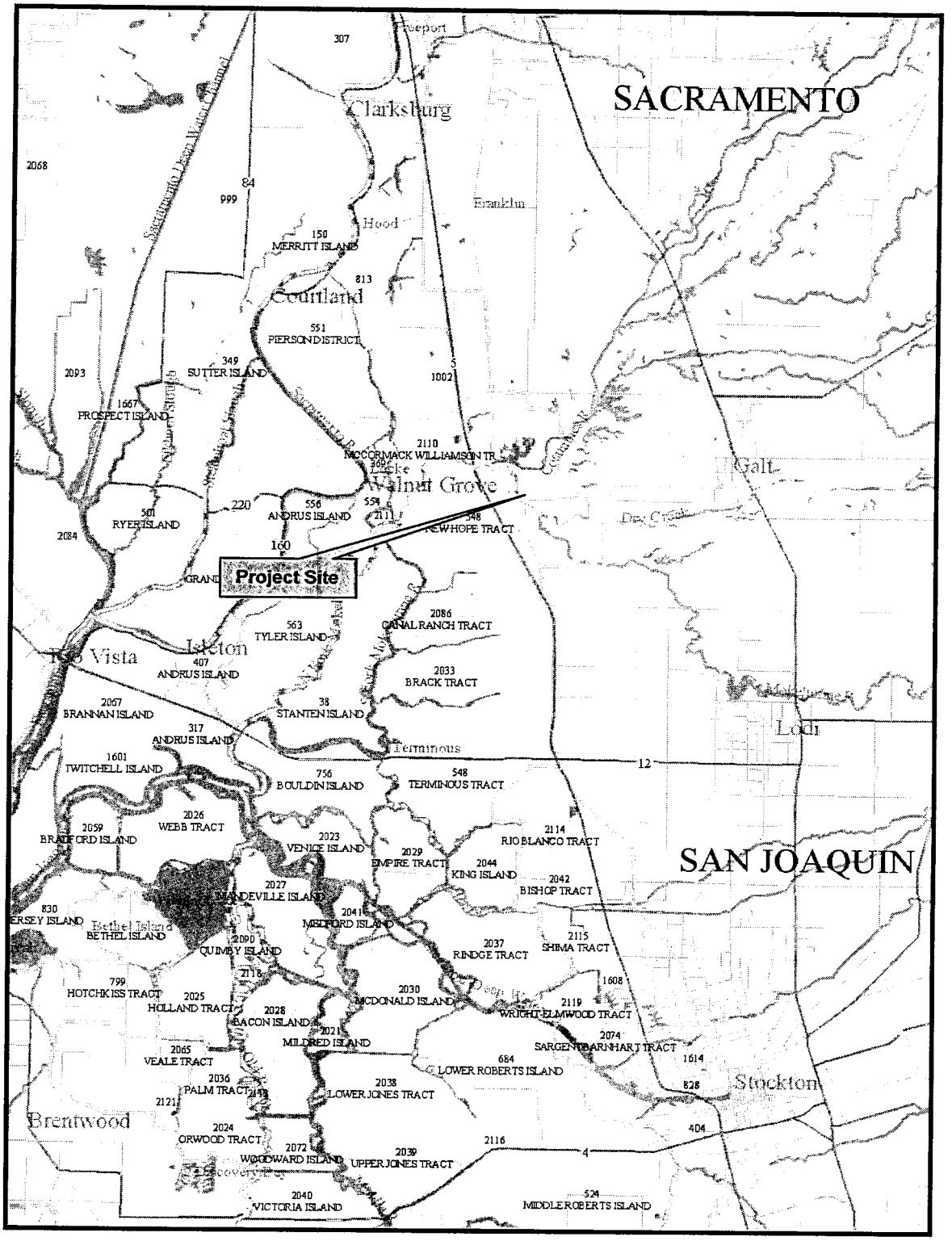


Plate IS-12: Reclamation Districts



According to the Land Use and Resource Management Plan for the Primary Zone of the Delta (1995) prepared by the Delta Protection Commission, there are a number of factors that adversely affect the stability of Delta levees. Although no Delta island has flooded as a result of seismic activity, many Delta levees are built upon materials that would be inherently unstable when subject to seismic shaking and could suffer major damage in the event of a large earthquake. Delta reclamation has also resulted in substantial land subsidence over time, primarily due to oxidation that occurs when peat soils are exposed to air, and subsidence of the islands has resulted in increased pressure on the levees from water in the adjacent channels. The levees are constantly subjected to erosion from natural and created causes including: flood flow, tides, wind waves, vessel wakes, and waters drawn into the State and federal water projects.

The Sacramento County General Plan Safety Element (1993) also includes the following general information related to Delta levees and their stability:

> "The Delta region lies within a floodplain and is faced with a major flooding problem because of inadequate levee construction and maintenance, subsidence, seepage, erosion and seismicity. Flooding has occurred in some part of the Delta on the average of once every 3½ to 4 years. While construction of upstream reservoirs has reduced the threat of overtopping, Delta levee failures continue to be a serious problem. Since 1950, levee failures have been twice as likely to be caused by foundation or levee instability than by overtopping. The condition of Delta levees is continually worsening and flooding frequency is increasing. Flood protection is generally inadequate except for those areas protected by federally built or "project" levees.
>
> The Corps has estimated that there is likely to be 2 to 3 times the number of structural levee failures due to subsidence during the next 30 years as there has been in the last 30 years. Irrigated agricultural practices cause much of the subsidence. Organic soils on most Delta islands subside up to three inches a year which places increased hydrostatic pressure on the levees. Flooding is not limited to the winter storm season. Levee stability problems and the potential for liquefaction are year-round problems that can trigger flooding.
>
> While Sacramento has experienced relatively little seismic activity, faulting in neighboring regions, especially the San Francisco Bay area and the Sierra Nevada, suggests that the County could be affected by future ground motion originating elsewhere.
>
> Groundshaking is motion that occurs as a result of energy released during faulting. The intensity of shaking is determined by the physical characteristics of the soil and rock earthquake magnitude and location of epicenter, and the character and duration of ground motion.

> Liquefaction is a process whereby water in unconsolidated soils is subjected to pressure, usually produced by ground motion, causing these materials to behave as quicksand.
>
> The evaluation of potential for liquefaction is complex and factors that must be considered include soil type, soil density, groundwater table, and the duration and intensity of shaking. Liquefaction is most likely to occur in deposits of water-saturated alluvium or similar deposits of artificial fill.
>
> Sacramento County has two areas that have been suggested as posing potential liquefaction problems – the downtown area and the Delta. While there is little published geologic information on the liquefaction potential of Delta soils [it] may pose a serious threat to levees, especially as levees are built larger and higher to deal with continuing island subsidence. Levee failure, depending on the extent, could have disastrous effects on agriculture, natural gas supply, fisheries, and salt water intrusion from San Francisco Bay."

The levee along the Cosumnes River within the project site is considered a non-project or local levee, which is not within a reclamation district and is privately maintained. The project proposes to breach this levee. The proposed breach is approximately 30 feet wide at the base, 123 feet wide at the top, and approximately 120 feet across from the Cosumnes River to where the channel begins on the land-side of the existing levee. Approximately 12,200 cubic yards of material will be excavated and although no discharge into wetlands is proposed, incidental fallback is anticipated. The excavated material will be spread along the existing levee and seeded with riparian trees and shrubs and/or native grasses.

By breaching this levee the project site would be exposed to daily tidal inundation and intermittent flooding from the Cosumnes River. According to Sacramento County Department of Water Resources portions of the site are within a Central Valley Flood Protection Board's State Designated Floodway and are subject to permitting requirements of the Board for work within or near a designated floodway. Any work within the floodway will be authorized only after the appropriate permits are acquired.

All work within onsite Waters of the State or Waters of the U.S. will require applicable State Department of Fish & Game and U.S. Army Corps of Engineers permits prior to grading permit issuance (see Wetlands and Other Surface Waters discussion). Section 1603 of the State Fish and Game Code requires applicants to notify the California Department of Fish and Game (CDFG) before beginning a project if the project will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake or use materials from a streambed. The applicant has indicated that a Streambed Alteration Agreement application has been submitted to the Department of Fish and Game.

The physical impacts related to the levee breach are discussed in the Biological Resources section of this document. With the acquisition of the appropriate permits, impacts related to drainage and flooding are less than significant.

GRADING AND EROSION CONTROL

STORMWATER POLLUTION AND EROSION CONTROL

Section 402 of the Clean Water Act (CWA) established the National Pollutant Discharge Elimination System (NPDES) permit program to prohibit the unauthorized discharge of pollutants from a point source to U.S. waters. The County of Sacramento has obtained a Municipal Stormwater NPDES permit from the Central Valley Regional Water Quality Control Board under the requirements of the Clean Water Act to reduce pollutants found in urban stormwater runoff to the maximum extent practicable. The County complies with this permit by developing and enforcing ordinances and requirements to reduce the discharge of sediments and other pollutants in runoff from areas within the County.

Sacramento County must verify compliance with permit requirements by monitoring effluent, maintaining records, and filing periodic reports. A provision of the NPDES permit is the requirement that Sacramento County develop a Construction Site Management Program. The Construction Site Management Program is intended to help protect the water quality of surface waters by minimizing the amount of sediment runoff from a construction site. This is being accomplished by enforcement of the existing County Land Grading and Erosion Control Ordinance.

In addition, the NPDES permit requires Sacramento County to develop, administer, and implement a Comprehensive Stormwater Management Program in order to reduce stormwater pollution to the maximum extent practicable. Controlling urban runoff pollution during and after construction is critical. The goal is to minimize runoff pollution and protect the beneficial uses of receiving waters by employing a combination of pollutant source control and site specific treatment control measures.

The Guidance Manual for On-site Stormwater Quality Control measures refers to best management practices as being source control and treatment control measures incorporated in the design of a land development or redevelopment project, which prevents and/or reduces pollutants in stormwater runoff from the project to the maximum extent practicable.

Sacramento County enacted the *Land Grading and Erosion Control Ordinance* (Ordinance) in order to limit degradation of the water quality of watercourses; and curb the disruption of drainage system flow caused by clearing, grubbing, grading, filling, and excavating land (Sacramento County Code, Title 16, Chapter 16.44). The Ordinance established administrative procedures, minimum standards of review, and implementation and enforcement procedures for the control of erosion and sedimentation that are directly related to land grading activities. The standards of the Ordinance include the appropriate design and placement of erosion and sediment

control best management practices (BMPs), as specified in the *Sacramento County Guidance Manual for Development of Erosion and Sediment Control Plans* (1993).

The Stormwater Ordinance (Chapter 15.12 of the County Code) prohibits the discharge of unauthorized non-stormwater to the County's stormwater conveyance system and local creeks. It applies to all private and public projects in the County, regardless of size or land use type.

In addition to complying with the County's ordinances and requirements, 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 State Water Resources Control Board and enforced in Sacramento County by the Regional Board. Coverage is obtained by submitting a Notice of Intent to the State Board prior to construction. The General Permit requires preparation and implementation of a site-specific Stormwater Pollution Prevention Plan that must be kept on site at all times for review by the State inspector.

During the wet season (October 1 – April 30), the project must include an effective combination of erosion, sediment and other pollution control BMPs in compliance with the County ordinances and the State's Construction General Permit. During the rest of the year, typically erosion controls are not required, except in the case of predicted rain.

Erosion controls should always be the first line of defense, to keep soil from being mobilized in wind and water. Examples include stabilized construction entrances, tackified mulch, 3-step hydroseeding, spray-on soil stabilizers, and anchored blankets. Sediment controls are the second line of defense; they help to filter sediment out of runoff before it reaches the storm drains and local waterways. Examples include rock bags to protect storm drain inlets, staked, or weighted straw wattles/fiber rolls, and silt fences.

If sediment-laden or otherwise polluted runoff discharges from the construction site are found to impact the County's storm drain system and/or Waters of the State, the property owner will be subject to enforcement action and possible fines by the County and the Regional Board.

Project compliance with requirements outlined above, as administered by the County Municipal Services Agency and Central Valley Regional Water Quality Control Board (Regional Board), will ensure that project-related erosion and water pollution impacts are less than significant.

BIOLOGICAL RESOURCES

A Biological Data Report was prepared for the project by Vinnedge Environmental Consulting (Appendix C). The report was prepared to provide an assessment of the existing biological conditions and to evaluate the potential for the presence of special status plant and wildlife species on the project site. Subsequent to the preparation of the Biological Data Report, a Plant Survey was prepared to identify all special status

plant species occurring on the site (Appendix D). None of the special status plant species identified in the Biological Data Report were found during that survey.

Table IS-5 below lists all the wildlife species analyzed in the Biological Data Report. There are 21 species listed in the table as having potential habitat on the project site; however the project is not expected to have a substantial adverse affect on many of these species. The project will restore the site to riparian habitat subject to daily tidal influences and is not expected to result in loss of the identified habitats. Plant and wildlife species that have the potential to be impacted by project activities are discussed below.

NATIVE OAK TREES

Over the years, a significant number of trees have been removed throughout Sacramento County to facilitate urban development, to accommodate agriculture, to provide fuel wood, or to be milled into building materials. It is clear that with continued urban and rural development, the County's woodlands and the variety of species they support will disappear unless concerted efforts are pursued to protect this valuable resource. Sacramento County has identified the value of its native and landmark trees and has adopted measures in its General Plan to provide for their preservation. The Tree Ordinance (Chapter 19.04 of the County Code) Section 19.04.030 (6) provides the following definition: "Landmark tree" means an especially prominent or stately tree on any land in Sacramento County, including privately owned land." Heritage trees are native oak trees that are at or over 19 diameter at breast height (dbh). All native oak trees are protected under the Conservation Element of the County of Sacramento General Plan. When development requires removal of native oaks, replacement planting is required pursuant to County policy. The Conservation Element also requires the preservation of landmark trees, as well as non-oak natives, such as California black walnuts and California sycamores, wherever possible. It should be noted that to be considered a tree, as opposed to a seedling or sapling, the tree must have a diameter at breast height (dbh) of at least 6 inches or, if it has multiple trunks of less than 6 inches each, a combined dbh of 10 inches.

The County's preferred mitigation for removal of oak trees is plantings onsite. When the required mitigation cannot be accommodated onsite, plantings must occur in areas with long-term survivability and in areas without existing oak canopy. Therefore, oak tree plantings are not permitted to occur in the yards of individual residential lots or within street medians or planters. DERA has found the plantings in private yards to be unsuccessful in past projects, due to improper irrigation, maintenance, or removal by homeowners. The balance of mitigation that remains after replanting may occur through conservation easements, approved off-site plantings, or mitigation banks, or as a last resort, the County Tree Preservation Fund.

PROJECT IMPACTS

The project site contains many native and non-native trees. The trees are generally found along the perimeter of the property except for a few sparsely distributed trees

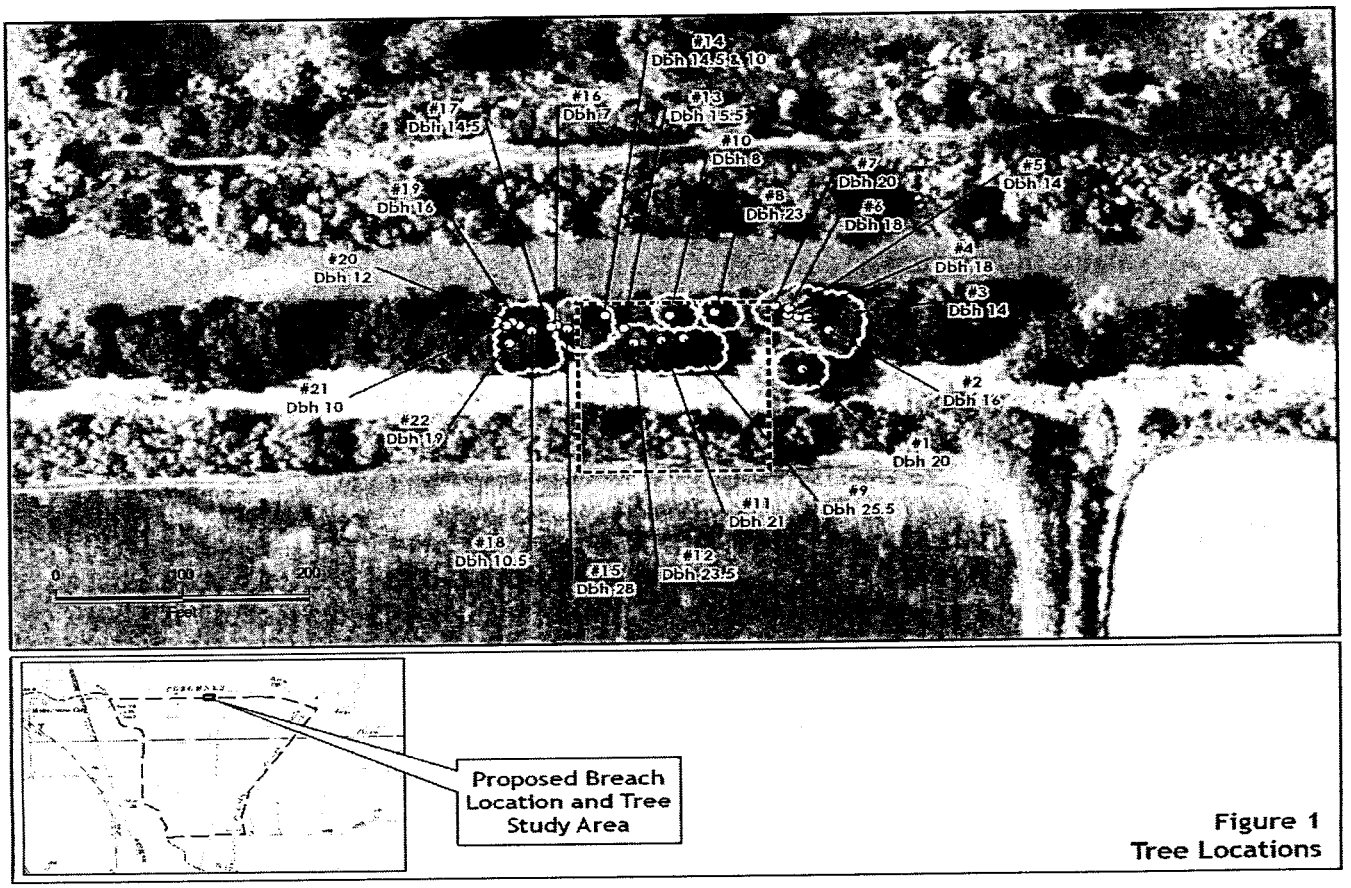
within the interior of the property and a stand of oak trees located in the southwestern portion of the property. A native oak tree inventory was prepared for the project by Westervelt Ecological Services on February 11, 2009. The report identified all native oak trees exceeding 4 inches in diameter within the vicinity of the proposed breach location on the Cosumnes River levee (Appendix E). A total of 22 valley oak trees were recorded. Of these trees, 8 are located immediately within the proposed breach area. See **Error! Reference source not found.** for illustration of trees located within the vicinity of the breach location and Table IS-4 for a description of those trees.

Table IS-4: Oak Trees Within the Breach Vicinity

Tree Number	Common Name	DBH	Dripline	Condition
1	valley oak	20	20	Good
2	valley oak	16	16	Good
3	valley oak	14	14	Good
4	valley oak	18	18	Good
5	valley oak	14	14	Good
6	valley oak	18	18	Good
7	valley oak	20	20	Good
8	valley oak	23	23	Poor
9	valley oak	25.5	25.5	Poor
10	valley oak	8	8	Good
11	valley oak	21	21	Poor
12	valley oak	23.5	23.5	Poor
13	valley oak	15.5	15.5	Poor
14	valley oak	24.5	24.5	Good
15	valley oak	28	28	Poor
16	valley oak	7	7	Fair
17	valley oak	14.5	14.5	Poor
18	valley oak	10.5	10.5	Poor
19	valley oak	16	16	Fair
20	valley oak	12	12	Good
21	valley oak	10	10	Good
22	valley oak	19	19	Good
Total dbh inches:				**378**
Total dbh removed for breach:				**189**

The proposed levee breech will result in the removal of 8 native valley oak trees. Removal of these trees is discussed in the Riparian Habitat section of this document. The remainder of the trees onsite will be retained as the project intends to avoid impacting these trees. To ensure that the trees located adjacent to the proposed levee breech and the stand of valley oaks in the southwestern portion of the property are not impacted by project construction protective measures have been included as mitigation to require avoidance of these trees.

Plate IS-13: Oak Trees within Breach Vicinity



Proposed Breach Location and Tree Study Area

Figure 1
Tree Locations

The protective measures, as described above and included as mitigation, will ensure that impacts to native oak trees are less than significant.

RIPARIAN HABITAT

A riparian habitat is simply defined as a distinct community of plants and animals found in and alongside a stream or river. These communities can be up to a mile wide adjacent to large rivers, or a narrow border along the banks of small creeks. The 1993 Sacramento County General Plan Update recognizes that riparian areas are an integral and vital element of the County's natural landscape. These communities provide a rich and diverse habitat that serves as a permanent or seasonal home to a plethora of wildlife species and provides open space and flood control. In 1993 in the Sacramento River Valley only 25,000 of the estimated 500,000 acres of riparian habitat existing in 1850 remained. Recognizing the need protect this valuable and dwindling habitat; Sacramento County adopted policies to preserve and protect existing habitat while encouraging the creation and/or restoration of riparian habitat when possible.

County General Plan Conservation Element Policies CO-62 and CO-112 state:

> CO-62. Ensure no net loss of marsh and riparian woodland acreage, values, or functions.
>
> CO-112. Channel modifications shall retain marsh and riparian vegetation whenever possible or otherwise recreate the natural stream channel consistent with the ecological integrity of the preexisting stream. Modifications resulting in wetland or riparian loss shall be mitigated.

The project is bordered to the north by the Cosumnes River, to the east by Grizzly Slough, and to the west by the Mokelumne River. The area adjacent to these rivers is considered riparian habitat. As previously stated the project proposes to breach the levee along the Cosumnes River. According to the applicant this breach will result in impacts to 0.23 acres of riparian habitat. This area includes 189 dbh inches of valley oak trees (trees 8 – 14, see Table IS-4 and Plate IS-13). The project proposes to establish oak forest through on site planting of 10,000 acorns collected from existing oak groves on site.

Mitigation has been included to require preparation of a re-vegetation plan for the levee breach, consistent with General Plan Policies CO-62 and CO-112. The plan shall include riparian habitat restoration including inch-for-inch replacement of the 189 inches of native valley oak trees. The protective measures as discussed in the Native Oak Trees section of this document will further reduce potential impacts to riparian habitat.

Implementation of the recommended riparian habitat mitigation measure as well as the oak tree protective measures will ensure that impacts related to the loss of riparian habitat are less than significant.

Table IS-5: Special Status Species Habitat within Project Vicinity

Species	Habitat Association	Habitat Suitability	Potential Habitat in Study Area
FEDERAL/STATE LISTED, PROPOSED, CANDIDATE AND/OR FULLY PROTECTED SPECIES			
INVERTEBRATES:			
Branchinecta lynchi (vernal pool fairy shrimp)	vernal pools; also found in sandstone rock outcrop pools	No suitable habitat within the project study area.	None
Branchinecta conservatio (Conservancy fairy shrimp)	found in large, turbid pools located in swales formed by old, braided alluvium, filled by winter/spring rains that last until June	The project is located outside of the species' known range.	None
Desmocerus californicus dimorphus (valley elderberry longhorn beetle)	blue elderberry (*Sambucus mexicana*); prefers to lay eggs in elderberries 2-8 inches in diameter, with some preference shown for "stressed" elderberries	Suitable habitat present.	Possible
Lepidrurus packardi (vernal pool tadpole shrimp)	vernal pools and swales in the Sacramento Valley containing clear to highly turbid water	No suitable vernal pool habitat within the project study area.	None
FISH:			
Acipenser medirostris (green sturgeon)	Sacramento and Klamath Rivers	Project is located outside the species' known range.	None
Hypomesus transpacificus (Delta Smelt)	brackish water in the Sacramento-San Joaquin Delta	Project is located outside the species' known range.	None
Oncorhynchus mykiss irideus (steelhead California Central Valley DPS)	Sacramento and San Joaquin Rivers and their tributaries	No suitable habitat on-site. Project site is within the species' range. Cosumnes and Mokelumne provide suitable habitat for migratory fish.	Possible
Oncorhynchus tshawytscha (Chinook salmon Central Valley spring-run ESU)	Sacramento River and its tributaries to the Carquinez Strait	Project is outside the species' range.	Not Expected
Oncorhynchus tshawytscha (Chinook salmon Winter-run ESU – Sacramento River)	Sacramento River and its tributaries downstream to the Carquinez Strait	Project is outside the species' range.	Not Expected

Species	Habitat Association	Habitat Suitability	Potential Habitat in Study Area
AMPHIBIANS:			
Ambystoma californiense (California tiger salamander)	seasonal/semi-permanent water sources (3-4 months in duration) and adjacent upland habitat	No suitable aquatic breeding habitat or upland estivation habitat is present on site. However, species is known from the Cosumnes River Preserve just north of the project site.	None
Rana aurora draytonii (California red-legged frog)	lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation up to 1,500 meters in elevation	Riverine habitat adjacent to site may contain suitable movement habitat for this species. No suitable breeding or upland habitat within project site. Species is not known from the study area.	Not Expected
REPTILES:			
Thamnophis gigas (giant garter snake)	freshwater marsh and low-gradient streams, and has adapted to drainage canals and irrigation ditches	Potential habitat present within and adjacent to Grizzly Slough and in the Cosumnes and Mokelumne Rivers as well as in irrigation ditch on site. Riparian woodlands and large rivers typically do not support GGS because these habitats lack emergent vegetative cover, lack basking areas, and lack prey populations. No records of this species from the site. Species documented within the Cosumnes River Preserve north of project site and approximately 4 miles west of the site.	Possible
BIRDS:			
Buteo swainsoni (Swainson's hawk)	nests in oaks or cottonwoods in or near riparian habitats. Forages in grasslands, irrigated pastures, and grain fields	Suitable nesting habitat in trees present on and adjacent to site. No known records of species nesting on site though several records within 1 mile.	Possible

Species	Habitat Association	Habitat Suitability	Potential Habitat in Study Area
Elanus leucurus (white-tailed kite)	inhabits grasslands, agriculture fields, oak woodlands, savannah and riparian habitats in rural and urban areas	Suitable nesting habitat is present within the mature trees on site.	Possible
Falco peregrinus (American peregrine falcon, nesting)	nests on cliffs, but frequently uses man-made structures such as bridges and buildings	No suitable nesting habitat is present on site.	None
Haliaeetus leucocephalus (bald eagle, nesting & wintering)	winters at lakes, reservoirs, river systems and some rangelands and coastal wetlands. Nests in large conifers near aquatic sources	Winter migrant only.	Not Expected
Laterallus jamaicensis coturniculus (California black rail)	inhabits tidal marshes, freshwater wetlands and marshes	No suitable wetland/marsh habitat is present on site.	None
Grus canadensis tabida (Greater sandhill crane)	summers in open terrain near shallow lakes or freshwater marshes. Winters in plains and valleys near bodies of fresh water	Winter roosting and foraging habitat present on site.	Present
Coccyzus americanus occidentalis (Western yellow-billed cuckoo)	wide, dense riparian forests with a thick understory of willows for nesting; sites with a dominant cottonwood overstory are preferred for foraging; may avoid valley-oak riparian habitats where scrub jays are abundant	Nesting habitat present on site though species has not been documented from the area.	Not Expected
Riparia riparia (bank swallow)	colonial nester in vertical cliffs and banks associated with riparian zones along streams, rivers, and lakes	Marginally suitable vertical bank nesting habitat is present on and adjacent to site. The species is not known from or adjacent to study area.	Not Expected
SENSITIVE AND LOCALLY RARE SPECIES			
INVERTEBRATES:			
*Hydrochara ricksecker*i (Ricksecker's water scavenger beetle)	aquatic in vernal pools, ponds, and seasonal wetlands	No suitable aquatic habitat for this species within the project site. Species has been documented from the Cosumnes River Preserve, within 1 mile of the site.	Not Expected
FISH:			
Archoplites interruptus (Sacramento perch)	sloughs, slow-moving waters, and lakes of the Central Valley	Potential habitat in Grizzly Slough, though species has not been documented from the area.	Not Expected

Species	Habitat Association	Habitat Suitability	Potential Habitat in Study Area
AMPHIBIANS:			
Rana boylii (foothill yellow-legged frog)	rocky, cascading streams in woodland, chaparral and coniferous forests	No suitable cascading stream habitat is present within the rivers and sloughs adjacent to the project site.	None
Scaphiopus hammondii (Western spadefoot toad)	shallow streams with riffles and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands	No seasonal wetland habitat is present on-site. Suitable habitat present on north bank of Cosumnes River outside the project site. Species is known from the Cosumnes River Preserve.	Not Expected
REPTILES:			
Actinemys marmorata (Western pond turtle)	permanent or nearly permanent bodies of water and low gradient slow moving streams	Suitable aquatic habitat is present adjacent to site and suitable upland habitat is present on site.	Possible
BIRDS:			
Ardea alba (great egret, rookery)	aquatic habitats including shores, tideflats, marshes, swamps, ponds, lakes, rivers and streams	Suitable rookery habitat is present within or adjacent to the project site. No known rookery from site or within 1-mile radius.	Not Expected
Ardea herodias (great blue heron, rookery)	aquatic habitats including shores, tideflats, marshes, swamps, ponds, lakes, rivers and streams	Suitable rookery habitat is present within or adjacent to the project site. No known rookery from site or within 1-mile radius.	Not Expected
Circus cyaneus (northern harrier, nesting)	freshwater and saltwater marshes and adjacent upland grasslands. Nests on the ground in tall grasses in grasslands and meadows	Suitable habitat present. Species is known from Cosumnes River Preserve.	Possible
Accipiter striatus (sharp-shinned hawk, nesting)	north-facing slopes in conifers, including ponderosa pine, black oak, & Jeffrey pines, preferably in riparian areas	Suitable nesting habitat is present on site.	Possible
Accipiter cooperii (Cooper's hawk, nesting)	dense stands of oak woodlands, riparian deciduous forests, or other forest habitats often near water & suburban areas	Suitable nesting habitat is present on site. Species has been observed on site.	Present
Buteo regalis (ferruginous hawk)	open terrain in plains and foothills where ground squirrels and other prey are available. Does not nest in California	Species would occur as a winter migrant only.	Not Expected
Falco columbarius (merlin, wintering)	Wintering habitat included open forests, grasslands, agricultural fields, mud flats and urban areas	Suitable wintering habitat is present on site.	Possible

Species	Habitat Association	Habitat Suitability	Potential Habitat in Study Area
Falco mexicanus (prairie falcon, nesting)	Nests on cliffs and at times in old raven or eagle stick nests on cliff, bluff, or rock outcrop	No suitable nesting habitat is present on site.	None
Athene cunicularia hypugea (Western burrowing owl)	Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows	Site lacks burrows suitable to support species. No CNDDB records from area.	Not Expected
Asio flammeus (short-eared owl, nesting)	Nests on the ground in a shallow depression	Site lacks open grassland habitat but supports fields and sufficient cover to support nesting owls. Occasional visitor to Cosumnes River Preserve.	Possible
Selasphorus rufus rufous (hummingbird, nesting)	Breeds in forested and brushy habitats in north coastal California	Marginally suitable nesting habitat is present within the woodland habitat within and adjacent to the project site.	Not Expected
Selasphorus sasin (Allen's hummingbird, nesting)	Breeds in a variety of habitats including moist coastal areas, scrub, chaparral and woodlands	Suitable nesting habitat is present within the woodland habitats within and adjacent to the project site.	Possible
Progne subis (purple martin, nesting)	Nests in tall, old trees near a body of water in open forests, woodlands, & riparian habitats	Suitable nesting habitat is present within the woodlands. Species not a known breeder from the study area, but is an occasional visitor within the Cosumnes River Preserve.	Not Expected
Baeolophus inornatus (oak titmouse, nesting)	an oak obligate species, the oak titmouse inhabits oak woodlands, oak savannahs, pinyon and juniper woodlands and occasionally suburban areas with oaks	Suitable nesting habitat is present in the on-site Central Coast Riparian Scrub and off-site oak woodlands.	Possible
Lanius ludovicianus (loggerhead shrike, nesting)	Inhabits a variety of habitats from open grasslands and scrub to woodlands and riparian areas	Suitable nesting and foraging habitat is present in the agricultural fields and woodlands within and adjacent to the project site. Species is known from the Cosumnes River Preserve.	Possible
Dendroica petechia brewsteri (yellow warbler, nesting)	Nests in dense, shrubby thickets dominated by willows along water courses	Suitable nesting habitat is present in riparian habitat within and adjacent to the project site.	Possible
Agelaius tricolor (tricolored blackbird, nesting colony)	Nest in emergent vegetation within aquatic and riparian habitats	Limited suitable nesting habitat present in valley freshwater marsh habitat on site. Species is known breeder in the Cosumnes River	Possible

Species	Habitat Association	Habitat Suitability	Potential Habitat in Study Area
		Preserve.	
Carduelis lawrencei (Lawrence's goldfinch, nesting)	arid oak/pine woodlands, foothills and chaparral	Limited to no suitable nesting habitat present within project site.	Not Expected
MAMMALS:			
Lasiurus blossevillii (western red bat)	Roosts individually in foliage within trees along riparian areas, orchards and suburban areas. Favors cottonwoods, willows, sycamores, and walnut trees	Riparian and stream habitat provides suitable foraging habitat. Roosting habitat is present in large native trees in the project site. Species is known from the Cosumnes River Preserve.	Possible
Corynorhinus townsendii townsendii (Townsend's western big-eared bat)	caves and mines, but may also use bridges, buildings, rock crevices and tree hollows	Marginal secondary roost habitat is present in large mature trees in project vicinity.	Possible
Lasionycteris noctivagans (silver-haired bat)	conifer and mixed conifer forests, especially old growth	No suitable habitat is present on site.	None
Myotis yumanensis (Yuma myotis bat)	riparian obligate. Roosts in a variety of habitats including bridges, buildings, caves, mines, cliff crevices and trees	Riparian corridor in project study area provides suitable foraging habitat. Marginal roosting habitat is present in large native trees on site.	Possible
Nyctinomops macrotis (big free-tailed bat)	rugged and rocky arid landscapes in desert scrub, woodland and evergreen habitats	Marginal secondary roost habitat is present in large mature trees on site. Not known from area.	Not Expected
Antrozous pallidus (pallid bat)	rocky terrain in open areas in lowlands, foothills and mountainous areas. Roosts in caves, rock crevices, mines, hollow trees, buildings and bridges in arid regions	Roosting habitat present on site. Species is known from the Cosumnes River Preserve.	Possible
Taxidea taxus (American badger)	open areas with friable soils within woodlands, grasslands, savannah and desert habitats	Limited suitable grassland habitat is present within the project site. No secondary sign or burrows were observed during the survey. Species is known from the Cosumnes River Preserve.	Not Expected

VALLEY ELDERBERRY LONGHORN BEETLE

The project site contains habitat for the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). The valley elderberry longhorn beetle (VELB), is listed as a federally threatened species. This animal is fully protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). The valley elderberry longhorn beetle (beetle) is completely dependent on its host plant, elderberry (*Sambucus* species), which is a common component of the remaining riparian forests and adjacent upland habitats of California's Central Valley. Over 90% of our riparian forests have been cleared in the past century for agricultural, as well as urban and suburban, development. The wood from these forests has also been used extensively as fuel and building materials. Additionally, extensive use of pesticides, grazing and other mismanagement have severely degraded otherwise undisturbed patches of riparian habitat.

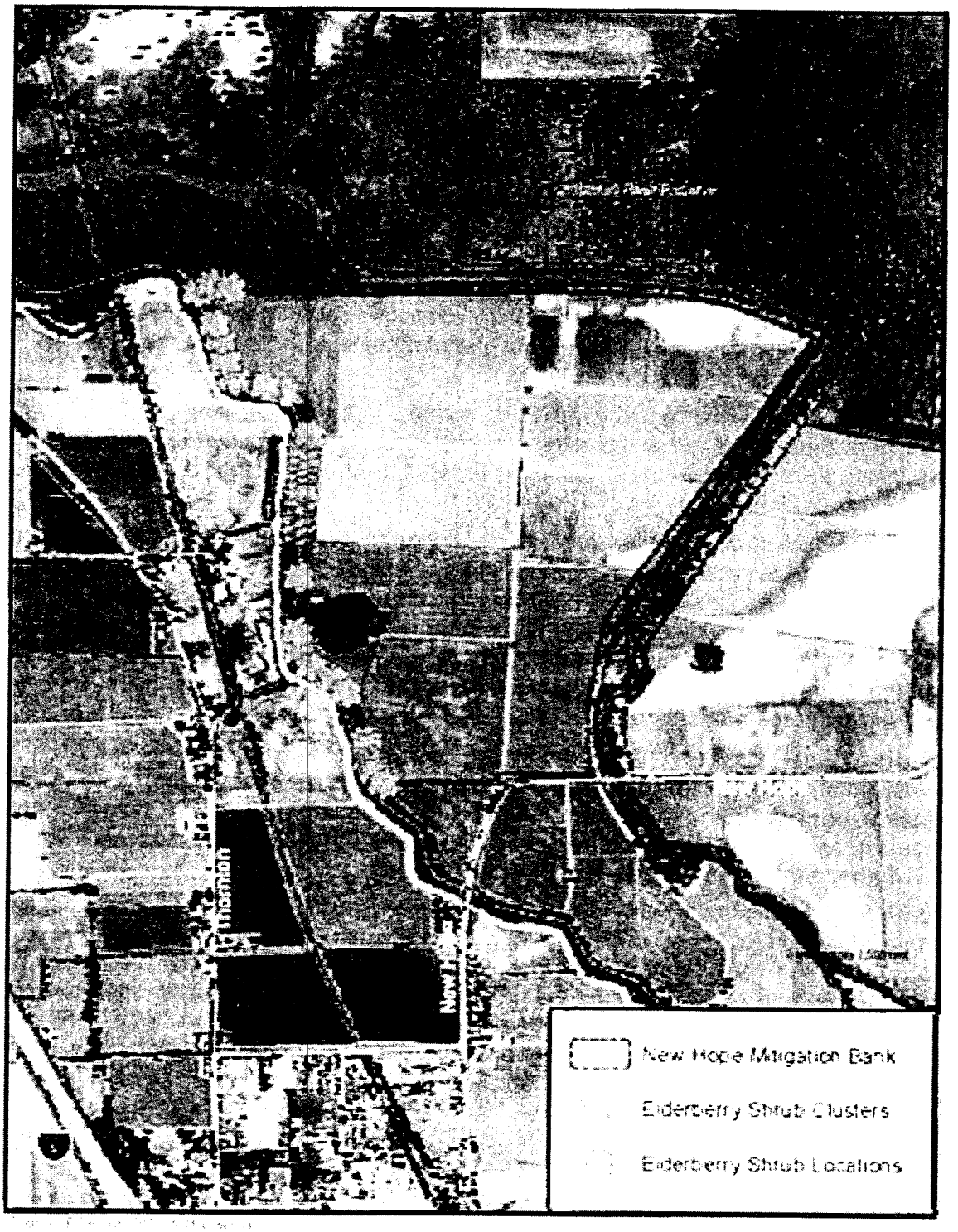
The life cycle takes one or two years to complete. The animal spends most of its life in the larval stage, living within the stems of an elderberry plant. Adult emergence is from late March through June, about the same time the elderberry produces flowers. The adult stage is short-lived.

If elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level occur within 100 feet of the proposed project site, or are otherwise located where they may be adversely affected by the proposed action, consultation with the US Fish and Wildlife Service (USFWS) will be required. In order to minimize impact to VELB the "Conservation Guidelines for the Valley Elderberry Longhorn Beetle" (July 9, 1999) outlines suggests installing protective fencing around the shrub, plant relocation, and/or replacement planting.

The Biological Data Report prepared for the project site as well as a recent field investigation indicates the presence of scattered shrubs of blue elderberry along the western property boundary (see Plate IS-14). The shrubs are located in an area not expected to be affected by the proposed onsite grading. Given the location of the elderberry shrubs, onsite preservation is anticipated.

USFWS guidelines state that complete avoidance (no adverse effects) may be assumed when a 100-foot (or wider) buffer is established and maintained around elderberry plants. USFWS may approve encroachment inside the 100-foot buffer area, but a minimum setback of 20 feet must still be provided. Therefore mitigation measures have been added to establish a buffer around the elderberry plants. With this mitigation impacts to the valley elderberry longhorn beetle are expected to be less than significant.

Plate IS-14: Elderberry Shrub Locations



NESTING RAPTORS

The project site contains suitable nesting habitat for nesting raptors. Raptors are defined as members of the order Falconiformes (vultures, eagles, hawks, and falcons) and the order Strigiformes (owls). Common species of raptors found locally include: red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), Swainson's hawk (*Buteo swainsoni*), American kestrel (*Falco sparverius*), barn owl (*Tyto alba*), and great horned owl (*Bubo virginianus*). The following raptors are listed as California State Species of Special Concern: northern harrier (*Circus cyaneus*), osprey (*Pandion haliaetu*), merlin (*Falco columbarius*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperi*), prairie falcon (*Falco mexicanus*), ferruginous hawk (*Buteo regalis*), golden eagle (*Aquila chrysaetos*), and burrowing owl (*Athene cunicularia*). American peregrine falcon (*Falco peregrinus anatum*), golden eagle, and white-tailed kite (*Elanus leucurus*) are classified as Fully Protected under California Fish and Game Code Section 3511, 4700, 5050, and 5515. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Raptors and their active nests are protected by the Fish and Game Code of California (§3503.5, 3511, and 3513). The Code states the following: "It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird." Because most raptors migrate they are also protected by the federal Migratory Bird Treaty Act of 1918, which states "unless and except as permitted by regulations, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill" a migratory bird. Section 3(18) of the federal Endangered Species Act defines the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Causing a bird to abandon an active nest may cause harm to egg(s) or chick(s) and is therefore considered "take."

The project site contains mature valley oak trees and Fremont cottonwoods located in the oak riparian forest, which provide suitable nesting habitat for the hawks. The nesting survey, as discussed in the Swainson's hawk section below, will reduce any potential impacts to nesting raptors to less than significant.

SWAINSON'S HAWK

The Swainson's hawk (*Buteo swainsoni*) is listed as a threatened species by the State of California and is a candidate for federal listing as threatened or endangered. It is a migratory raptor typically nesting in or near valley floor riparian habitats during spring and summer months. In addition Swainson's hawk is protected under the Federal Migratory Bird Treaty Act of 1918.

Swainson's hawks were once common throughout the state, but various habitat changes, including the loss of nesting habitat (trees) and the loss of foraging habitat

through the conversion of native Central Valley grasslands to certain incompatible agricultural and urban uses has caused an estimated 90% decline in their population.

Swainson's hawks feed primarily upon small mammals, birds, and insects. Their typical foraging habitat includes native grasslands, alfalfa, and other hay crops that provide suitable habitat for small mammals. Certain other row crops and open habitats also provide some foraging habitat. The availability of productive foraging habitat near a Swainson's hawk's nest site is a critical requirement for nesting and fledgling success. In central California, about 85% of Swainson's hawk nests are within riparian forest or remnant riparian trees. CEQA analysis of impacts to Swainson's hawks consists of separate analyses of impacts to nesting habitat and foraging habitat.

The CEQA analysis provides a means by which to ascertain impacts to the Swainson's hawk. When the analysis identifies impacts, mitigation measures are established that will reduce impacts to the species to a less than significant level. Project proponents are cautioned that the mitigation measures are designed to reduce impacts and do not constitute an incidental take permit under the California Endangered Species Act (CESA). Anyone who directly or incidentally takes a Swainson's hawk, even when in compliance with mitigation measures established pursuant to CEQA, may violate the California Endangered Species Act.

NESTING HABITAT

For determining impacts to and establishing mitigation for nesting Swainson's hawks in Sacramento County, the California Department of Fish and Game (CDFG) recommends implementing the measures set forth in the CDFG Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California (November 1, 1994). These state that no intensive new disturbances, such as heavy equipment operation associated with construction, should be initiated within ¼ mile of an active Swainson's hawk nest in an urban setting or within ½ mile in a rural setting between March 1 and September 15.

The nearest known Swainson's hawk nest is within ¼ mile of the project site (see Plate IS-15). Since the project is within ¼ mile of a known nest site, construction activities on the project site may impact an active nest. If construction, grading, or project-related improvements are to occur between March 1 and September 15, a focused survey for Swainson's hawk and other raptors nests on the site and on nearby trees (within ½ mile of the site) shall be conducted by a qualified biologist within 14 days prior to the start of construction work (including clearing and grubbing). If active nests are found a 500-foot temporary setback shall be established and CDFG shall be contacted to determine appropriate protective measures. If no active nests are found during the focused survey, no further mitigation will be required. If active nests are found, the protective setback and measures required by CDFG will prevent impacts to nesting Swainson's hawks.

FORAGING HABITAT

Statewide, CDFG recommends implementing the measures set forth in the CDFG Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California (November 1, 1994) for determining impacts to Swainson's hawk foraging habitat unless local jurisdictions develop an individualized methodology designed specifically for their location. Sacramento County has developed such a methodology and received confirmation from CDFG in May 2006 that the new methodology is a better fit for unincorporated Sacramento County and should replace the statewide, generalized methodology for determining impacts to foraging habitat.

Swainson's hawks are known to forage up to 18 miles from their nest site; however, that is the extreme range of one individual bird's daily movement. It is more common for a Swainson's hawk to forage within 10 miles of its nest site. Therefore it is generally accepted and CDFG recommends evaluating projects for foraging habitat impacts when they are within 10 miles of a known nest site.

Swainson's hawk foraging habitat value is greater in large expansive open space and agricultural areas than in areas which have been fragmented by agricultural-residential or urban development. The new methodology for unincorporated Sacramento County is based on the concept that impacts to Swainson's hawk foraging habitat occur as properties develop to increasingly more intensive uses on smaller minimum parcel sizes. Therefore, the methodology relies mainly on the minimum parcel size allowed by zoning to determine habitat value. For the purpose of the methodology, properties with zoning of AG-40 and larger maintain 100% of their foraging habitat value and properties with AR-5 zoning and smaller have lost all foraging habitat value. Table IS-6 illustrates the continuum between AG-40 and AR-5 that represents the partial loss of habitat value that occurs with fragmentation of large agricultural land holdings. The large, 50% loss of habitat value between AG-20 and AR-10 is due to the change in land use from general agriculture to agricultural-residential.

Plate IS-15: Swainson's Hawk Nesting Sites

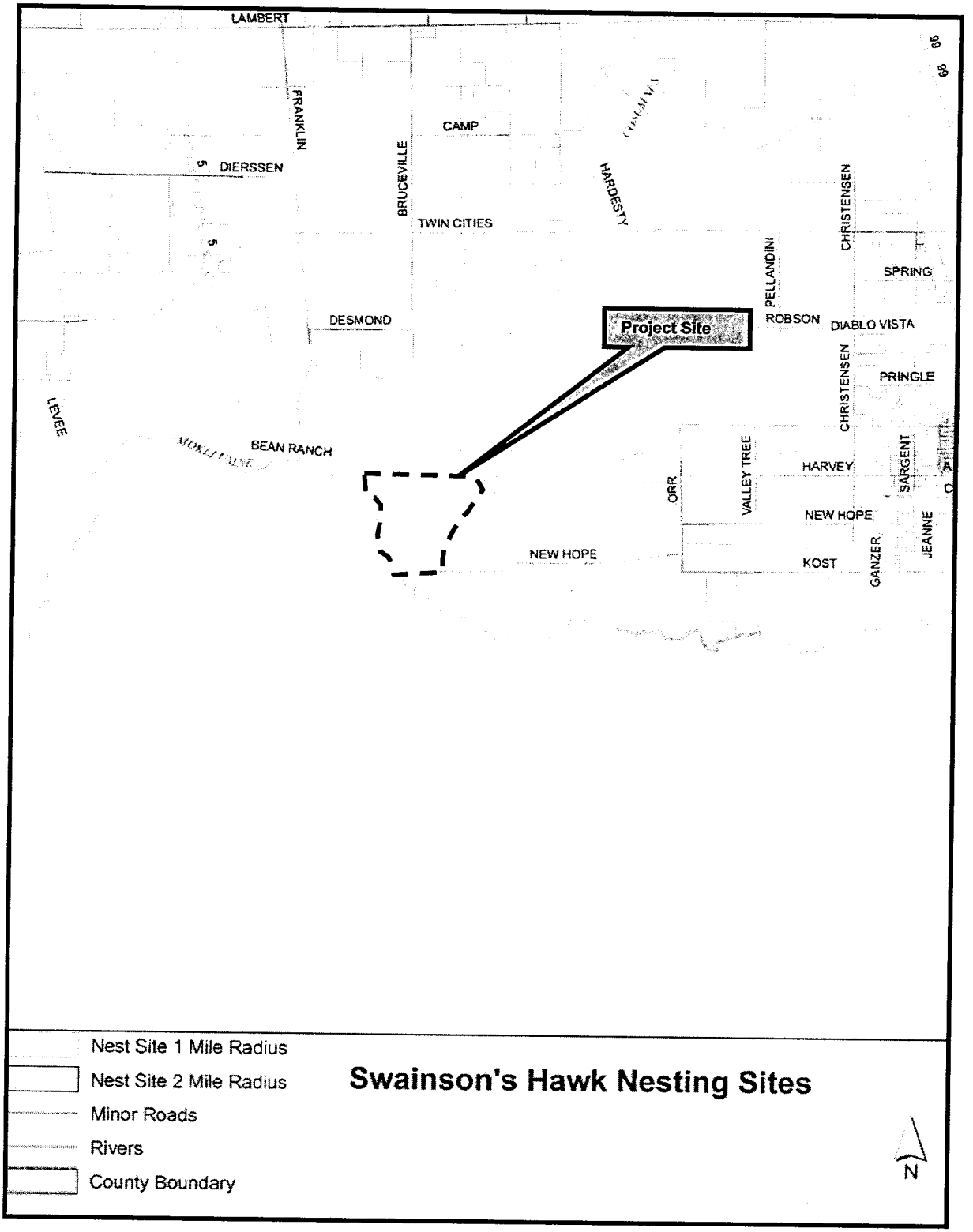


Table IS-6: Swainson's Hawk Foraging Habitat Value by Zoning Category

Zoning Category	Habitat Value Remaining
• AG-40 and above (e.g., AG-80, 160 etc.)	• 100%
• AG-20	• 75%
• AR-10	• 25%
• AR-5 and smaller (e.g., AR-2, 1 or RD-5, 7, 10, 15, 20 etc.)	• 0%

The project is located within one mile of five nest sites (Plate IS-15), and is located in a predominantly agricultural area. However, the project does not propose to change the zoning of the site. The entire site will be maintained as open space for use as a mitigation bank. No loss of Swainson's hawk foraging habitat is anticipated as a result of this project.

With mitigation requiring that nesting surveys are conducted, impacts to Swainson's hawks are considered less than significant.

TRICOLORED BLACKBIRD

The project area has potential habitat for the tricolored blackbird (*Agelaius tricolor*). According to the Biological Data Report, limited suitable nesting habitat is present in the valley freshwater marsh habitat onsite and the species is a known breeder in the Cosumnes River Preserve. Tricolored blackbirds (TBB) are known to nest near wetlands in large (several hundred to several thousand birds) breeding colonies in habitat made up of blackberry thickets, bulrush (*Scirpus* sp.) or cattails (*Typha* sp.) patches.

TBB is both a California State and federally listed species of concern. The California Environmental Quality Act (CEQA) provides protection not only for State-listed or federally-listed species, but also for any species that can be shown to meet the criteria for listing (CEQA Guidelines Section 15380). Species that meet these criteria are often considered species of special concern by the Department of Fish and Game. In addition, the species is afforded basic protection under the federal Migratory Bird Treaty Act of 1918. Data indicates that populations have been rapidly declining for decades, probably due to water diversion, land conversion, and heavy predation by mammals and predatory birds.

TBB breeds within the vicinity of its nest, usually about 85 square feet. This range may be less in dense vegetation or more in less suitable cover[3]. In order to prevent potential impacts to nesting tricolored blackbirds, biological surveys will be required in areas that have potential nesting habitat in or adjacent to the project area. If TBB are found nesting within 300 feet of the survey area, the CDFG will be contacted and the project construction might have to be postponed until fledging of all nestlings (about July 15). If no TBB are found during the pre-construction survey, no further mitigation would be required. Mitigation measures will reduce any potential impacts to TBB to less than significant.

FISH

CENTRAL VALLEY STEELHEAD

Steelhead trout (*Oncorhynchus mykiss*) is a federally listed threatened species that inhabits the Sacramento-San Joaquin river and delta system. Critical habitat has been designated within Sacramento County on the Sacramento River, American River, Mokelumne River, Dry Creek (both north and south creeks).

Steelhead live in the ocean and migrate to accessible reaches in their natal streams to spawn. Accessible reaches are those within the historical range of the fish that can still be occupied by any life stage of salmon or steelhead. In California, peak spawning occurs from December through April in small streams and tributaries with cool, well-oxygenated water.

According to the Biological Data Report submitted by the applicant there is no suitable Central Valley Steelhead habitat at the project site; however, the Mokelunme River basin has been identified by the National Oceanic and Atmospheric Administration (NOAA) as supporting this species. According to the applicant, once completed, the restored channels on the site will provide suitable steelhead habitat. The mixed riparian habitat within and adjacent to the project site is a component in maintaining cool water temperatures, water quality, and cover and refuge for adult steelhead and smolts.

DELTA SMELT

Delta smelt (*Hypomesus transpacificus*) is listed as a federal threatened species and a California endangered species. The delta smelt is a small, slender-bodied fish with a typical adult size of two to three inches that is found only in the Sacramento-San Joaquin Estuary. This species occurs in the Sacramento River as far upstream as the confluence with the American River. Delta smelt may also be found in the Cosumnes River and San Joaquin River.

---

[3] Orians, G. H. 1961. The ecology of blackbird (Agelaius) social systems. Ecol. Monogr. 31:285-312.

Historically, it was one of the most common species in the estuary. However, the population declined dramatically in the early 1980s. Delta smelt are considered environmentally sensitive because they live only one year, have a limited diet, have a low fecundity for a fish with planktonic larvae, are poor swimmers, are easily stressed, and reside primarily in the interface between salt and freshwater. The reasons for the delta smelt decline are multiple and probably compounded by one another. In decreasing order of importance they include: 1) reductions in delta water outflow; 2) entrainment (movement of fish by currents caused by pumping) losses to water diversions; 3) high delta water outflows; 4) reduction in prey food organisms; 5) toxic substances; 6) disease, competition, and predation; and 7) loss of genetic integrity.

The size of the delta smelt population varies from year to year, with extremely low levels observed in 1994 and 1996 and moderate levels observed in 1993 and 1995. The 1997 population appeared to be only slightly larger than in 1996. The abundance of delta smelt in 1998 was relatively low (summer tow net surveys) and slightly higher during fall midwater trawls (moderately low). The 1999 delta smelt population does not appear to be larger than we have seen in previous years. Total delta smelt catch was similar to previous years and average densities were similar to 1996 and 1997 and were lower than in 1995 and 1998.

A five-year recovery review period established under the USFWS Recovery Plan had to be restarted in 1998 because abundance and distribution criteria were not achieved in 1997. The status in 1999 of the delta smelt was stable to declining. According to data collected in the San Francisco Estuary, California in 2004 and 2005 abundance indices of delta smelt are declining. These recent record low abundance indices of delta smelt coincided with: 1) recent declines of other pelagic fish species in the Delta (native: longfin smelt, splittail; non-native: striped bass and threadfin shad, 2) recent increases in winter salvage at south Delta water export facilities, 3) steady low relative abundance of post-larval and juvenile delta smelt detected since 2002 and 4) suggested declines in abundance of major prey items since the early 2000s[4].

Threats to this species include insufficient freshwater flow rates due to urban and agricultural water diversion, poisoning due to contaminants (e.g., pesticides, fertilizers, sewage, and polluted urban-runoff), entrapment by water projects, predation and competition for resources by exotic species, habitat loss due to impassable barriers, and elevated water temperatures due to water diversion and urbanization.

According to the Biological Data Report submitted by the applicant there is no suitable habitat for the Delta Smelt at the project site; however, California Department of Fish and Game staff (T. Gardner) indicated that there is potential for the species to occur within the Cosumnes River.

---

[4] Castillo G., D. Fleming, Dege, M., R. Mayfield. 2006 Long-term Changes of Threatened Delta Smelt U.S. Fish and Wildlife Service, 4001 N. Wilson Way, Stockton, CA 95205 in American Fisheries Society California-Nevada Chapter's Symposium & 40th Annual Meeting March 2006. San Luis Obispo, CA.

PROJECT IMPACTS

The project construction includes breaching a levee on the Cosumnes River. The project does not propose any work within the waters of the Mokelunme River; therefore, no project-related effects to aquatic species within its waters are expected to occur.

According to the project applicant the proposed channels on the site are designed to drain completely, or nearly completely, during lower low water for approximately 2 to 3 hours to disrupt the breeding cycle of non-native predatory fish. The drainage of the channels will only occur during low flow periods in the Cosumnes River (i.e., summer and fall months) because during typical winter and spring months the hydrology of the site is primarily driven by storm and snowmelt runoff and water surface elevations are greater as a result of these flows.

Once the project is completed a long-term management plan will be implemented to ensure the viability of the site. The plan includes routine monitoring and minor maintenance tasks intended to assure the viability of the Mitigation Bank in perpetuity. To ensure that suitable habitat for special-status fish species is available on site Westervelt Ecological Services staff will conduct annual site examinations and fish surveys every 10 years.

Implementation of the storm water quality measures outlined in the Grading and Erosion Control section of this document as well as the management plan discussed above will ensure that impacts to fish are less than significant.

WETLANDS AND OTHER SURFACE WATERS

Streams and wetlands provide important functions and values, both for surrounding ecosystems and for people. They provide food, water, shelter, breeding grounds and nurseries for numerous species. Many endangered plant and animal species are dependent on stream and wetland habitats (and the associated riparian zone) for their survival. Large creeks and waterways are fed by innumerable small, perhaps intermittent tributaries spread throughout a watershed. Many streams, both large and small, have areas where water flow slows and spreads, creating marshes and other wetland habitats alongside, or even in, the stream corridor. Wetlands may also be "isolated" depressions that are filled seasonally by overland runoff and dry by late spring. Wetland hydrologic functions include the reduction of flow velocity, ground-water recharge or discharge, the retention of flood waters, and the influence of wetlands on atmospheric processes. Wetland water quality functions include the trapping of sediment, pollution control, and the biochemical processes that take place as water enters, is stored in, or leaves a wetland. Stream habitats supply drinking water, support recreational opportunities, provide fish and wildlife habitat, contain floodwater, and supply water to agriculture.

The 1987 Army Corps Wetlands Delineation Manual is used to determine whether an area meets the technical criteria for a wetland and is therefore subject to local, State or federal regulation of that habitat type. State and federal authorities typically consider all other flowing surface waters with a bed and bank to be creeks and streams.

Surface waters are regulated by both the federal and State government. The federal government (the United States Army Corps of Engineers is generally the lead agency) regulates surface waters pursuant to Section 404 of the Clean Water Act. Section 404 protects all "navigable waters", which are defined as traditional navigable waters that are or were used for commerce, or may be used for interstate commerce; tributaries of covered waters; and wetlands adjacent to covered waters, including tributaries. The *Solid Waste Agency of Northern Cook County (SWANCC) vs. United States Army Corps of Engineers (Army Corps)* decision made by the Supreme Court in 2001 altered the types of surface waters that can be regulated by Section 404. Isolated wetlands, that is, those wetlands that are not hydrologically connected to other "navigable" surface waters or their tributaries, are not considered to be subject to federal jurisdiction. However, the *SWANCC* decision only prohibits federal jurisdiction over isolated waters; State and local jurisdiction still applies.

The California State government (the Regional Water Quality Control Board is generally the lead agency) regulates wetlands and other surface waters pursuant to Section 401 of the Clean Water Act, which does require that waters be "navigable", and under the Porter-Cologne Water Quality Control Act, which does not require that waters be "navigable". For this reason, the *SWANCC* decision does not prevent State government from regulating isolated wetlands and other non-navigable waters. Federal non-jurisdictional waters can be regulated by the State of California pursuant to Porter-Cologne, rather than by the Clean Water Act. Surface waters are also regulated by the California Department of Fish and Game; Fish and Game, however, also has jurisdiction over the plant and animal species that use the surface waters rather than just the habitat itself.

ONSITE WETLANDS

A Preliminary Delineation of Wetlands and Other Waters of the United States was prepared for the project by Valley Environmental Consultants, LLC (Appendix F). The wetland mapping and conclusions made in the delineation have been verified by the Army Corps (Appendix G). The verification concurs that there are 1.242 acres of waters of the United States, which include farmed wetlands and wetland ditches (see Plate IS-16 for Exhibit A of the delineation).

While the delineation results indicate that the Corps has jurisdiction over onsite wetland features, the State also has jurisdiction over isolated waters and the applicant should consult with the Department of Fish and Game to determine if any permits or approvals are needed related to these waters. The County also has jurisdiction, through General Plan Conservation Element Policy CO-96, which requires no net loss of wetlands.

The project will construct approximately 21,286 linear feet of channels with a total footprint of 13.4 acres. The channel creation will intersect onsite wetland ditches in four locations resulting in approximately 0.012 acres of direct temporary disturbance and cross one farmed wetland resulting in approximately 0.043 acres of direct temporary disturbance. According to the project description, construction within the wetland ditches will occur after the flood gates, which drain the ditches, are closed at the

Cosumnes River and all onsite water has been drained. Completion of the project will result in daily tidal inundation which will introduce water levels that are equal to or greater than pre-construction levels. Prior to construction the farmed wetland will be completely dry and post-construction tidal flows will inundate the farmed wetland. Post-construction wetland ditches and farmed wetlands are expected to be sustained or enhanced resulting in an overall increase in onsite wetlands.

COSUMNES RIVER

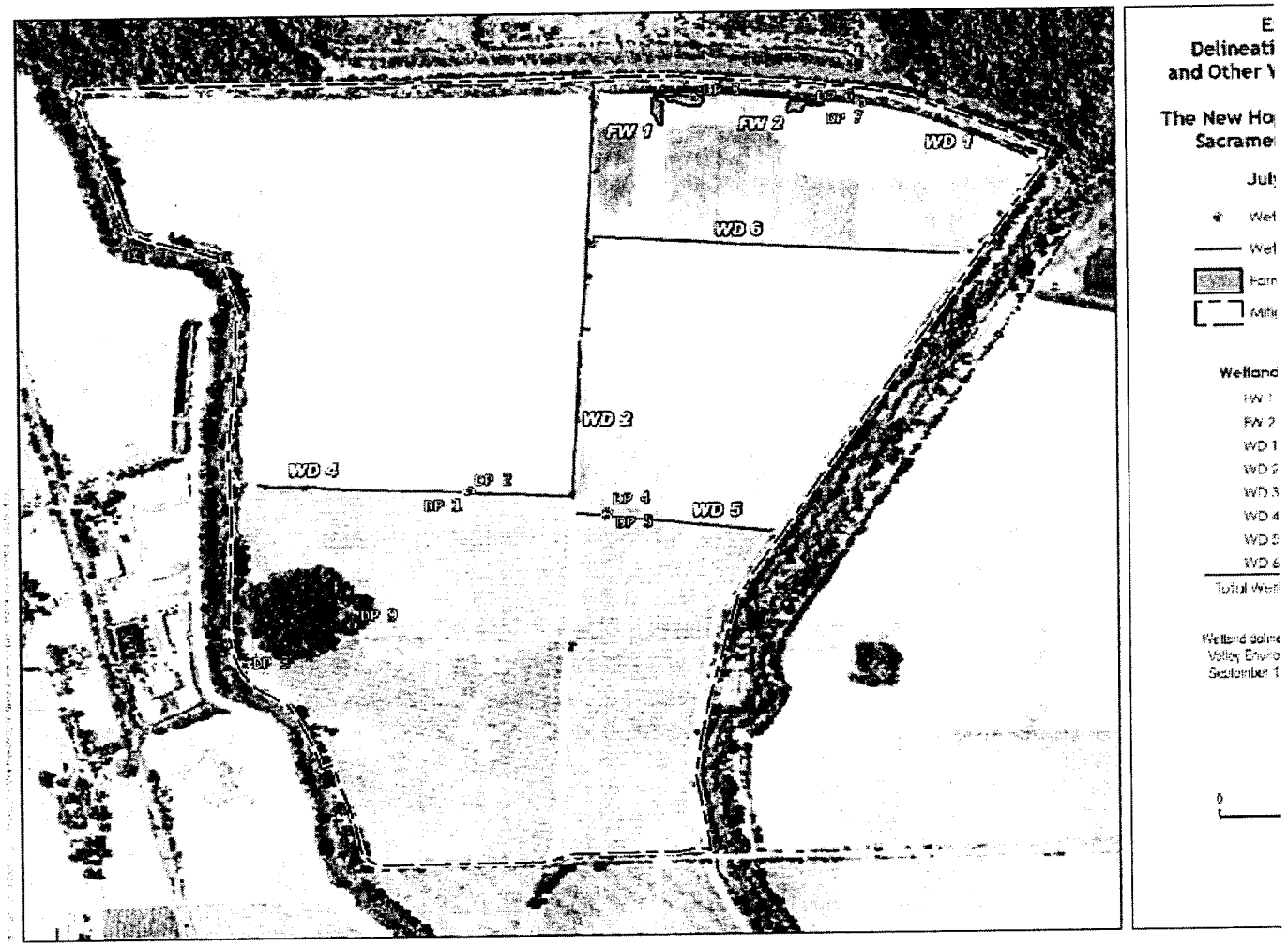
The project site is bounded on the north, east, and west by levees. The westernmost levee along the Mokelumne River is within Reclamation District 348. The Cosumnes River and Grizzly Slough levees, along the northern and eastern boundaries of the site are not within a Reclamation District and are privately maintained.

The project proposes to breach the northern levee, which currently separates the property from the Cosumnes River. The breach will be approximately 30 feet wide at the base, 123 feet wide at the top, and approximately 120 feet across from the Cosumnes River to where the channel begins on the land-side of the existing levee. Approximately 12,200 cubic yards of material will be excavated and although no discharge into wetlands is proposed, incidental fallback is anticipated. The excavated material will be spread along the existing levee and seeded with riparian trees and shrubs and/or native grasses.

The estimated Ordinary High Water Mark (OHWM) at the breach location is 9.0 National Geodetic Vertical Datum (NGVD) 29. The applicant has estimated the work to be done below the OHWM to be approximately 0.023 acres. To avoid in-water construction activities, final breach of the levee will occur during the summer Mean Lower Low Water (MLLW) tidal cycle. This area is considered jurisdictional and is subject to Army Corps permitting requirements.

Mitigation has been included to ensure that the applicant acquires all appropriate permits and that if no net loss of wetlands is not achieved through this process the applicant pays into the County Wetlands Trust Fund. With grading and erosion controls, as discussed above, acquisition of all applicable permits, and no net loss of wetlands, impacts related to wetlands and other surface waters are considered less than significant.

Plate IS-16: Exhibit A of the Wetlands Delineation



CULTURAL RESOURCES

The California Environmental Quality Act (CEQA) defines cultural resources as historical and unique archaeological resources that meet significance criteria of the California Register of Historical Resources. The eligibility criteria of the California Register include the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history. (Public Resources Code SS5024.1, Title 14 CCR, Section 4852).

Under CEQA, lead agencies must consider the effects of their projects on cultural resources.

A cultural resources analysis entitled, *"Determination of Eligibility and Effect for the New Hope Mitigation Bank Project Area: Sacramento County, California"* was undertaken on the project site by Peak and Associates in November 2008. The following discussion is based on this study and contains portions of the analysis.

CULTURAL SETTING

ARCHAEOLOGICAL AND ETHNOLOGICAL BACKGROUND

The Sacramento area has a long prehistoric association. Indigenous people populated the Sacramento Valley region for thousands of years prior to the influx of Euro-American settlers in the mid-1800s. Archaeological evidence confirms that the initial occupation of California occurred prior to 8,000 years ago. The earliest inhabitants were apparently transient hunters and gatherers who exploited the various ecological zones on a seasonal rotation. As time progressed, more permanent settlements were established and food collecting became intensive, involving storage of food.

The project area is located in the ethnographic territory of the Plains Miwok. The project area lies in the northern territory of the Plains Miwok which encompasses the lower Mokelumne River, Cosumnes River, and the Sacramento River from Rio Vista to Freeport. Evidence of Plains Miwok semi-permanent settlements are found adjacent to waterways on high ridges or knolls, south-facing slopes overlooking water ways or on the sandy islands of the Delta. The Plains Miwok can be described as seasonally mobile hunter-gathers who utilized the resources in their geographical territory,

including but not limited to water fowl, fish, seeds, nuts, acorns, and a variety of small and large mammals (mule deer, tule elk, jackrabbits, beaver, etc.).

HISTORICAL BACKGROUND

The initial Euro-American settlement of Sacramento County occurred with the arrival of John Sutter in 1839. Sutter established himself at what would become Sutter's Fort. The establishment of the outpost brought with it an increase in Euro-American trappers, hunters and settlers to the area. After the arrival of Sutter, several individuals obtained large Mexican Land Grants in the area. As a result of the Mexican War (1847-1848), California became part of the territory of the United States. In 1848, gold was discovered at Sutter's Mill in Coloma. These events hastened the settlement of the area and the development of Sacramento as an economic and transportation center. The designation of Sacramento as the state capital, in 1854, also resulted in the area's increase in socio-political importance.

The project area does not lie on a portion of the early Mexican land grants nor does it lie within the land that was considered desirable for mining gold. The project area does lie about a mile from the western boundary of the Sanjon de los Moquelumnes land grant. The history of land titles along this section of the Cosumnes River is extremely complex due to how the original land grant was awarded. The grant was awarded to Anastasio Chabolla in 1844 allowing eight leagues of land on the south side of the Cosumnes; however no more detail was given and no formally defined boundaries were established. Due to this uncertainty, the assumed boundaries could be pushed in almost any direction in a broadly defined area. Ultimately, the project area, including the area within the original land grant, is considered historically peripheral to the historical residential and commercial properties within the greater Sacramento area. The project area was mainly utilized for agricultural and ranching purposes during historical times as much of the area is still utilized for these purposes today. According to the current owners of the property, the project site has been used continuously for agricultural production since conversion (i.e. levee construction and clearing) in the period between 1894 and 1910.

RESEARCH

A record search was performed at the North Central Information Center (NCIC) of the California Historical Records Information System by Peak and Associates to identify known resources in the project area. The record search indicated that no portion of the project site had been previously surveyed. Reported within the southeastern portion of the project area is one site, CA-SAC-11, for which the location is not certain. The site was first recorded by Schenck and Dawson in 1929 as a burial and occupation site. In the same year, the site was reported as completely destroyed by agricultural activities. Three artifacts were later found in the area, reportedly thrown up from a nearby canal dredger.

In addition to research conducted at the North Central Information Center, Peak also contacted the Native American Heritage Commission requesting a check of the Sacred

Lands files for the project area. A reply indicated that there were no listed properties in the project area. The reply also included a list of individuals and organizations to contact that may have information on the project area. Peak sent letters to the listed parties. Peak and Associates note d the following regarding consultation with Native American individuals and organizations:

> A letter reply was received from the Ione Band, who believe that the project area lies within their "Tribe's Ancestral Territory."
>
> On January 7, 2008, phone calls were made to Dwight Dutschke and Mary Daniels-Tarango, asking them to contact is if they had any further concerns. No return phone calls have been received Leland Daniels, a trained archaeologist with over thirty years if experience, served as a field technician for the survey effort, and helped to search for the reported site location.
>
> Prior to the recent backhoe trenching operation, we called Leland Daniels on October 19, 2008 and told him about the proposed trenching program. He thought it would be a good idea to make sure that the site would not be harmed in the future. After excavations were completed, we reported to him about the results of the study, and he was happy with the lack of a site in the project area.

FIELDWORK

METHODS

The applicant enlisted Peak and Associates to perform the necessary work cultural resources analysis on the project site. This included a filed survey that was completed in September and November 2007. Peak and Associates archaeologists conducted the pedestrian survey, in which the project site was surveyed using transect intervals no greater than 15 meters apart, spaced evenly apart. The maximum physical footprint, the area of potential ground-disturbing activities, was surveyed. Where deemed necessary, the team dug small holes by hand to check the sediments. Ground visibility on the project site was considered excellent throughout due to recent harvesting of crops and vegetation clearance in the project area.

SURVEY RESULTS

No new cultural resources sites, prehistoric or historic, were uncovered during the survey effort. As noted above CA-SAC-11 was shown as possibly being located within the project site. During the survey effort, two attempts were made at trying to relocate CA-SAC-11. No surface indication was noted at either reported location of CA-SAC-11. To address a possibility of a buried remnant on the site, a field trenching program was conducted to definitively determine presence or absence on the project site. The backhoe trenching on the project site occurred on October 21 and 22, 2008. In all 26 trenches were excavated in the reported vicinity of CA-SAC-11. All of the trenches were excavated down to the solid sterile clay hardpan layer, which ranged from 3 feet to

8 feet below the surface. In all, there were no artifacts found, or any materials to suggest that even a remnant of CA-SAC-11 exists within the project area

CONCLUSIONS

Although there was no new prehistoric, ethnohistoric, or historic period resources discovered within the project site, nor was CA-SAC-11 relocated, there is the potential for the existence of buried archaeological materials within the project area. CEQA requires that lead agencies protect both known and unknown cultural resources; therefore, mitigation is recommended to ensure that in the event that cultural resources are discovered on the project site during construction/grading phases that all work shall be halted until a qualified archaeologist may evaluate the resource encountered.

With mitigation, environmental impacts to potentially sensitive cultural resources are considered less than significant.

ENVIRONMENTAL MITIGATION MEASURES

Mitigation Measure A is critical to ensure that identified significant impacts of the project are reduced to a level of less than significant. Pursuant to Section 15074.1(b) of the CEQA Guidelines, this measure must be adopted exactly as written unless both of the following occur: (1) A public hearing is held on the proposed changes; (2) The hearing body adopts a written finding that the new measure is equivalent or more effective in mitigating or avoiding potential significant effects and that it in itself will not cause any potentially significant effect on the environment.

MITIGATION MEASURE A: CONSTRUCTION-RELATED AIR QUALITY EMISSIONS

The following mitigation measures will reduce NOx and PM_{10} construction related emissions to a level of less than significant.

1. Prior to construction, the applicant shall provide to the SMAQMD a work plan that includes an inventory of the heavy duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet average 20 percent NO_x reduction and 45 percent particulate matter reduction compared to the most recent CARB fleet average at the time of construction.

   The work plan shall also include a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The

inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

2. The project shall ensure that exhaust emissions from all off-road diesel powered equipment used on the project site does not exceed 40 percent opacity for more than three minutes in any one hour. This test shall be performed by an ARB certified visible emissions evaluator. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and the lead agency and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations.

3. To mitigate construction-related particulate matter emissions, the following shall apply: keep soil moist at all times, maintain two feet of freeboard space on haul trucks, and use emulsified diesel or diesel catalysts on applicable heavy duty diesel construction equipment.

MITIGATION MEASURE B: OAK TREE CONSTRUCTION PROTECTION

With the exception of the trees removed and compensated for through Mitigation Measure C, below, all native oak trees located adjacent to the proposed levee breech location and the stand of valley oak trees located in the southwestern portion of the site, which are 6 inches dbh or larger, on the project site, all portions of adjacent off-site native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. For the stand of valley oak trees this measurement shall be for the perimeter of the stand and measured from the trunk to the tip of the longest limbs of the outermost trees. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.

2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the oak trees prior to initiating project construction, in order to avoid damage to the trees and their root system. When areas under the tree canopy cannot be fenced, a temporary ground covering is required and shall cover the root zone and remain in place at the specified thickness until project activity within the root zone has been completed. The protective ground cover shall consist of shredded wood chips spread over the roots at a minimum of 6-inches in depth (keeping the trunk clear of chips), and layered by ¾-inch quarry gravel to stabilize the ¾-inch plywood sheets or steel plates laid on top.

3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support), or any other items shall be attached to the oak trees.

4. With the exception of driplines located along the existing levee road, no vehicles, construction equipment, mobile home/office, supplies, materials, or facilities shall be driven, parked, stockpiled, or located within the driplines of the oak trees.

5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the oak trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications, and irrigation management guidelines.

6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of oak trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.

7. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of the oak trees.

8. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees.

9. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".

10. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

11. Any fence/wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts to the trees.

MITIGATION MEASURE C: RIPARIAN HABITAT

In order to compensate for the loss of 0.23 acres of riparian habitat located within the proposed Cosumnes River levee breech, the following mitigation is required:

1. Prior to the issuance of grading or other improvement permits, the applicant shall prepare a re-vegetation plan for the altered channel, consistent with General Plan Policies CO-62 and CO-112, that restores Cosumnes River riparian habitat. The plan shall include inch for inch replacement for the 189 inches of native oak tree loss based on a 3 acorn per inch loss ratio.

2. The re-vegetation plan shall be prepared by a qualified biologist or botanist and provide quantifiable success criteria and include at least a one year monitoring and adaptive management program. The plan shall be subject to the approval of the Department of Environmental Review and Assessment.

3. Any mitigation required by the state or federal permitting agencies that compensates for the loss of riparian vegetation, functions and values and that provides for a native re-vegetation plan consistent with or exceeding the requirements of measures C-1 and C-2 above shall be deemed mitigation sufficient to reduce impacts to a less than significant level and may be utilized in place of items 1 and 2 above.

MITIGATION MEASURE D: PROTECTION FOR VALLEY ELDERBERRY LONGHORN BEETLE

If construction activities are to occur within 200 feet of onsite VELB habitat the following measures will be required in order to ensure that the habitat is not degraded.

1. Temporary construction fencing and flagging shall be installed at least 100 feet outside the edge of the driplines of the elderberry plants. In areas where encroachment on the 100-foot buffer has been approved by USFWS, provide a minimum setback of at least 20 feet from the dripline of each elderberry plant and provide documentation of USFWS approval of the reduced setback.

2. Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.

3. Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the

Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.

4. Instruct work crews about the status of the beetle and the need to protect its elderberry host plant.

MITIGATION MEASURE E: SWAINSON'S HAWK AND OTHER RAPTORS NESTING HABITAT

If construction, grading, or project-related improvements are to occur between March 1 and September 15, a focused survey for Swainson's hawk and other raptor nests on the site and on nearby trees shall take place within ½ mile of the site, and shall be conducted by a qualified biologist within 14 days prior to the start of construction work (including clearing and grubbing). If no active nests are found during the focused survey, no further mitigation will be required. If active nests are found, the proponent shall do the following:

1. With CDFG permission, the applicant may avoid impacts to active nests by establishing a 500-foot temporary setback with fencing that prevents any project activity within 500 feet of the nest. A qualified biologist shall verify that setbacks and fencing are adequate and will determine when the nestlings are no longer dependent on the nesting habitat.

2. Consult with the California Department of Fish and Game (CDFG) to determine if project activity will impact the nest. Provide the Department of Environmental Review and Assessment (DERA) with written evidence of the consult or a contact name and number from CDFG.

MITIGATION MEASURE F: SURVEYS FOR NESTING TRICOLORED BLACKBIRDS

If construction occurs between March 1 and July 31 pre-construction surveys for nesting tricolored blackbirds (TBB) shall be performed by a qualified biologist. Surveys shall include the project site and areas of appropriate habitat within 300 feet of the site. Surveys shall be conducted no less than 14 days and no more than 30 days prior to commencement of construction activities. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Department of Environmental Review and Assessment (DERA) prior to ground disturbing activity. If no TBB are found during the pre-construction survey, no further mitigation will be required. If an active TBB colony is found on-site or within 300 feet of the project site the project proponent shall do the following:

1. Consult with the California Department of Fish and Game (CDFG) to determine if project activity will impact the TBB colony(s). Provide the Department of Environmental Review and Assessment (DERA) with written evidence of the consult or a contact name and number from CDFG.

2. With CDFG permission, the applicant may avoid impacts to TBB by establishing a 300-foot temporary setback with fencing that prevents any project activity within 300 feet of the colony. A qualified biologist shall verify that setbacks and fencing are adequate and will determine when the colonies are no longer dependent on the nesting habitat (i.e. nestling have fledged and are no longer using habitat). The breeding season typically ends in July.

3. If TBB habitat is permanently destroyed, follow CDFG procedure to mitigate for habitat loss.

MITIGATION MEASURE G: WETLANDS AND SURFACE WATER IMPACTS

In order to mitigate for impacts to 1.242 acres of seasonal wetland on the site, the following mitigation is required:

Prior to the approval of any grading permits for channel modifications, the project applicant or property owner shall obtain all applicable permits from the U. S. Army Corps of Engineers (USCOE) and shall pay to the County of Sacramento an amount based on a rate of $35,000 per acre if less than 1:1 replacement/compensation occurs through the Federal permitting process. Any payment due shall be collected by the Department of Planning and Community Development and deposited in the Wetlands Restoration Trust Fund. A copy of any required USCOE permits and verification of any required payment shall be submitted to the Department of Environmental Review and Assessment.

MITIGATION MEASURE H: CULTURAL RESOURCES

Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914.

At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

MITIGATION MEASURE COMPLIANCE

Comply with the Mitigation Monitoring and Reporting Program (MMRP) for this project as follows:

1. The proponent shall comply with the MMRP for this project, including the payment of a fee to cover the Department of Environmental Review and Assessment staff costs incurred during implementation of the MMRP. The MMRP fee for this project is $5,000.00. This fee includes administrative costs of $600.00.

2. Until the MMRP has been recorded and the administrative portion of the MMRP fee has been paid, no final parcel map or final subdivision map for the subject property shall be approved. Until the balance of the MMRP fee has been paid, no encroachment, grading, building, sewer connection, water connection, or occupancy permit from Sacramento County shall be approved.

As the applicant, or applicant's representative, for this project, I acknowledge that project development creates the potential for significant environmental impact and agree to implement the mitigation measures listed above, which are intended to reduce potential impacts to a less than significant level.

Applicant [Original Signature on File] _____ **Date:** _____

INITIAL STUDY PREPARERS

Environmental Coordinator: Joyce Horizumi
Assistant Environmental Coordinator: Antonia Barry
Division Manager: Todd Smith
Project Leader: Charity Gold
Initial Review: Marianne Biner
Office Manager: Linda Wittkop Johnston
Administrative Support: Justin Maulit

SACRAMENTO COUNTY
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT
827 SEVENTH STREET, ROOM 220 SACRAMENTO, CALIFORNIA 95814
TELEPHONE: (916) 874-7914 FAX: (916) 874-8343
WWW.DERA.SACCOUNTY.NET

INITIAL STUDY CHECKLIST

FOR WESTERVELT WILLIAMSON ACT CONTRACT AMENDMENT AND GRADING PERMIT

CONTROL NUMBER: 2009-70005 AND PLNP2009-APB-00051

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. The words "significant" and "significance" used throughout the following checklist are related to impacts as defined by the California Environmental Quality Act.

INITIAL STUDY CHECKLIST

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
1. **LAND USE** - Would the project:				
a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to a general plan, specific plan or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X	The project is consistent with environmental policies of the Sacramento County General Plan and the Sacramento County Zoning Code.
b. Physically disrupt or divide an established community?			X	The project will not create physical barriers that substantially limit movement within or through the community.
2. **POPULATION/HOUSING** - Would the project:				
a. Induce substantial unplanned population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of infrastructure)?			X	The project does not propose new unplanned homes, businesses or extension of infrastructure.
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?			X	The project would result in the loss of one housing unit. This loss is considered minor in relation to the total housing stock.
3. **AGRICULTURAL RESOURCES** - Would the project:				
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance or areas containing prime soils to uses not conducive to agricultural production?			X	The soils on the project site are listed as Prime; however the project will not convert these soils to uses not conducive to agricultural production. See discussion in the "Land Use" section of the Initial Study.
b. Conflict with any existing Williamson Act contract?			X	The project site is covered by an active Williamson Act contract. Refer to the "Land Use" discussion in Initial Study.
c. Introduce incompatible uses in the vicinity of existing agricultural uses?			X	Given the nature of the proposed project, incompatibility between the project and existing agricultural uses is not anticipated.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
4. **AESTHETICS** - Would the project:				
a. Substantially alter existing viewsheds such as scenic highways, corridors or vistas?			X	The project does not occur in the vicinity of any scenic highways, corridors, or vistas.
b. Substantially degrade the existing visual character or quality of the site and its surroundings?			X	The project will not substantially degrade the visual character or quality of the project site.
c. Create a new source of substantial light, glare or shadow that would result in safety hazards or adversely affect day or nighttime views in the area?			X	The project would not result in substantial new sources of light, glare, or shadow.
5. **AIRPORTS** - Would the project:				
a. Result in a safety hazard for people residing or working in the vicinity of an airport/airstrip?			X	The project occurs outside of any identified public or private airport/airstrip safety zones.
b. Expose people residing or working in the project area to aircraft noise levels in excess of applicable standards?			X	The project is not located in the vicinity of an airport or airstrip.
c. Result in a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft?			X	The project does not affect navigable airspace.
d. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, which results in substantial safety risks?			X	The project does not involve or affect air traffic movement.
6. **PUBLIC SERVICES** - Would the project:				
a. Have an adequate water supply for full buildout of the project?			X	Upon completion, the project will not create additional demand for water supply.
b. Have adequate wastewater treatment and disposal facilities for full buildout of the project?			X	Upon completion, the project will not require wastewater treatment or disposal facilities.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
c. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	The Sacramento County Integrated Waste Management Plan provides for adequate waste disposal capacity to serve existing and anticipated development until the year 2010. The Keifer Landfill has capacity to accommodate solid waste until the year 2030.
d. Result in substantial adverse physical impacts associated with the construction of new water supply or wastewater treatment and disposal facilities or expansion of existing facilities?			X	The project would not require construction or expansion of new water supply, wastewater treatment, or wastewater disposal facilities.
e. Result in substantial adverse physical impacts associated with the provision of storm water drainage facilities?			X	The project would not require the addition of new stormwater drainage facilities.
f. Result in substantial adverse physical impacts associated with the provision of electric or natural gas service?			X	Project construction would not require electric or natural gas service.
g. Result in substantial adverse physical impacts associated with the provision of emergency services?			X	The project would not result in substantial adverse physical impacts associated with the provision of emergency services.
h. Result in substantial adverse physical impacts associated with the provision of public school services?			X	The project will not require the use of public school services.
i. Result in substantial adverse physical impacts associated with the provision of park and recreation services?			X	The project will not affect the provision of park services.
7. **TRANSPORTATION/TRAFFIC** - Would the project:				
a. Result in a substantial increase in peak hour vehicle trip-ends that could exceed, either individually or cumulatively, a level of service standard established by the County?			X	The project will not increase the trip generation capacity of the project site.
b. Result in a substantial adverse impact to access and/or circulation?			X	The project does not involve traffic circulation or vehicle access issues.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
c. Result in substantial adverse impact due to inadequate parking capacity?			X	No parking is required.
d. Result in a substantial adverse impact to public safety on area roadways?			X	Access and roadway improvements associated with the project will not substantially affect public safety on area roadways.
e. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			X	No conflicts with adopted policies, plans, or programs supporting alternative transportation have been identified.
8. **AIR QUALITY** - Would the project:				
a. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?		X		With mitigation the project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment. See "Air Quality" discussion in the Initial Study.
b. Expose sensitive receptors to pollutant concentrations in excess of standards?			X	The project will not expose sensitive receptors (i.e., schools, nursing homes, hospitals, daycare centers, etc.) to pollutant concentrations in excess of standards.
c. Create objectionable odors affecting a substantial number of people?			X	Objectionable odors are not expected from the proposed project.
9. **NOISE** - Would the project:				
a. Result in exposure of persons to, or generation of, noise levels in excess of standards established by the local general plan, noise ordinance or applicable standards of other agencies?			X	The completed project is not anticipated to generate noise.
b. Result in a substantial temporary increase in ambient noise levels in the project vicinity?			X	Project construction will result in a temporary increase in ambient noise levels in the project vicinity. This impact is considered less than significant due to the temporary nature of the these activities, limits on the duration of noise, and evening and nighttime restrictions imposed by the County Noise Ordinance (Chapter 6.68 of the County Code).

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
10. **HYDROLOGY AND WATER QUALITY** - Would the project:				
a. Substantially deplete groundwater supplies or substantially interfere with groundwater recharge?			X	The project will not rely on groundwater supplies and will not substantially interfere with groundwater recharge.
b. Substantially alter the existing drainage pattern of the project area and/or increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?			X	The project will alter the existing drainage pattern on the site and result in flooding on-site see "Drainage and Flooding" discussion in the Initial Study.
c. Develop within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map or within a local flood hazard area?			X	The project site is within a 100-year floodplain and/or local floodplain. Refer to the "Drainage and Flooding" discussion in the Initial Study.
d. Place structures that would impede or redirect flood flows within a 100-year floodplain?			X	The project will not place structures within the 100-year floodplain; however flood flows may be redirected. See "Drainage and Flooding" discussion in the Initial Study.
e. Expose people or structures to a substantial risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X	The project will not expose people or structures to a substantial risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
f. Create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems?			X	The project will not create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems.
g. Create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality?			X	The project will not create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
11. **GEOLOGY AND SOILS** - Would the project:				
a. Expose people or structures to substantial risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?			X	Sacramento County is not within an Alquist-Priolo Earthquake Fault Zone. Although there are no known active earthquake faults in the project area, the site could be subject to some ground shaking from regional faults. The Uniform Building Code contains applicable construction regulations for earthquake safety that will assure less than significant impacts.
b. Result in substantial soil erosion, siltation or loss of topsoil?			X	Compliance with the County's Land Grading and Erosion Control Ordinance will reduce the amount of construction site erosion and minimize water quality degradation by providing stabilization and protection of disturbed areas, and by controlling the runoff of sediment and other pollutants during the course of construction.
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, soil expansion, liquefaction or collapse?			X	The project is not located on an unstable geologic or soil unit.
d. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available?			X	The project will not require the use of septic tanks or alternative wastewater disposal systems.
e. Result in a substantial loss of an important mineral resource?			X	Although located in an area with known mineral resources, the proposed project would not significantly impact future use of important mineral resources located on site.
f. Directly or indirectly destroy a unique paleontological resource or site?			X	No known paleontological resources (e.g. fossil remains) or sites occur at the project location.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
12. **BIOLOGICAL RESOURCES** - Would the project:				
a. Have a substantial adverse effect on any special status species?		X		Valley Elderberry Longhorn Beetle and Swainson's Hawk habitat exist on the project site. Refer to "Biological Resources" discussion in Initial Study.
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community?		X		Valley Elderberry Longhorn Beetle habitat exist on the project site. Refer to "Biological Resources" discussion in Initial Study.
c. Have a substantial adverse effect on wetlands designated as jurisdictional waters of the United States as defined by Section 404 of the Clean Water Act?		X		Jurisdictional wetlands have been identified on the subject property(ies). Construction of the project would result in impacts to 1.242 acres of waters of the United States. Refer to "Biological Resources" discussion in the Initial Study.
d. Have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species?			X	Resident and/or migratory wildlife may be displaced by project construction. However, impacts are not anticipated to result in significant, long-term effects upon the movement of resident or migratory fish or wildlife species.
e. Adversely affect or result in the removal of native or landmark trees?		X		Native and/or landmark trees occur on the project site and will be affected by on-site construction. Refer to the "Oak Tree" discussion in the Initial Study.
f. Conflict with any local policies or ordinances protecting biological resources?			X	The project is consistent with local policies/ordinances protecting biological resources.
g. Conflict with the provisions of an adopted Habitat Conservation Plan or other approved local, regional, state or federal plan for the conservation of habitat?			X	The project does not conflict with any approved plan for the conservation of habitat.
13. **CULTURAL RESOURCES** - Would the project:				
a. Cause a substantial adverse change in the significance of an historical resource?		X		No known historical resources exist on the project site. Nonetheless, mitigation has been recommended to insure appropriate treatment should resources be uncovered during project implementation.

	Potentially Significant[i]	Less Than Significant with Mitigation[ii]	Less Than Significant or No Impact[iii]	Comments
b. Have a substantial adverse effect on an archaeological resource?		X		No known archaeological resources exist on the project site. Based on field efforts, it appears that the previously identified archaeological resource within the site, CA-SAC-11, was either completely destroyed or was mapped incorrectly within the project site. Nonetheless, mitigation has been recommended to insure appropriate treatment should resources be uncovered during project implementation.
c. Disturb any human remains, including those interred outside of formal cemeteries?		X		No known human remains exist on the project site. Nonetheless, mitigation has been recommended to insure appropriate treatment should remains be uncovered during project implementation.
14. **HAZARDS AND HAZARDOUS MATERIALS** - Would the project:				
a. Create a substantial hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?			X	The project does not involve the transport, use, and/or disposal of hazardous material.
b. Expose the public or the environment to a substantial hazard through reasonably foreseeable upset conditions involving the release of hazardous materials?			X	See 14.a
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?			X	The project does not involve the use or handling of hazardous material.
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in a substantial hazard to the public or the environment?			X	The project is not located on a known hazardous materials site.
e. Impair implementation of or physically interfere with an adopted emergency response or emergency evacuation plan?			X	The project would not interfere with any known emergency response or evacuation plan.

SUPPLEMENTAL INFORMATION

LAND USE CONSISTENCY	Current Land Use Designation	Consistent	Not Consistent	Comments
General Plan	Recreation and Resource Conservation Area Combining Zone	X		
Community Plan	n/a			
Land Use Zone	AG-80	X		

[i] **Potentially Significant** indicates there is substantial evidence that an effect MAY be significant. If there are one or more "Potentially Significant" entries and Environmental Impact Report (EIR) is required. Further research of a potentially significant impact may reveal that the impact is actually less than significant or less than significant with mitigation.

[ii] **Less than Significant with Mitigation** applies where an impact could be significant but specific mitigation has been identified that reduces the impact to a less than significant level.

[iii] **Less than Significant or No Impact** indicates that either a project will have an impact but the impact is considered minor or that a project does not impact the particular resource.

RECORDING REQUESTED BY AND WHEN RECORDED MAIL TO:

NAME: DERA

COUNTY MAIL CODE: 01-220

No Fee--For the Benefit of Sacramento County (Code 6103)

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

COUNTY OF SACRAMENTO
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT

MITIGATION MONITORING AND REPORTING PROGRAM

CONTROL NUMBER: 2009-70005 and PLNP2009-APB-00051

NAME: WESTERVELT WILLIAMSON ACT AMENDMENT AND GRADING PERMIT

LOCATION: The property is located at 7591 New Hope Road, on the north side of New Hope Road, at the terminus of New Hope Road and the Sacramento County line (San Joaquin county), in the Southeast community.

ASSESSOR'S PARCEL NUMBERS: 146-0140-003, 004

APPLICANT/OWNER:

Westervelt Ecological Services, LLC
Attn: Greg DeYoung

PROJECT DESCRIPTION:

1. A grading permit and rescission of an existing Williamson Act contract to simultaneously enter into a new Williamson Act contract for property in the AG-80 zone for the purpose of allowing open space uses in addition to agricultural uses.

TYPE OF ENVIRONMENTAL DOCUMENT:

X Negative Declaration
___ Prior Negative Declaration
___ Environmental Impact Report
___ Prior Environmental Impact Report
___ Supplemental Environmental Impact Report

PREPARED BY: Sacramento County Department of
Environmental Review and Assessment
827 7th Street, Room 220
Sacramento, CA 95814

PHONE: (916) 874-7914

MITIGATION MONITORING AND REPORTING PROGRAM ADOPTED BY: **DATE:**

ATTEST:_____

SECRETARY/CLERK

State of California
County of Sacramento

On _____ before me, _____(name, title of officer), personally appeared:

_____,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____

Signature

DECLARATION OF AGREEMENT

This Mitigation Monitoring and Reporting Program applies to certain real property, a Legal Description of which is attached as Exhibit A. I (We) the undersigned agree that this Mitigation Monitoring and Reporting Program applies to the real property described in Exhibit A. I (We) the undersigned am (are) the legal owner(s) of that property, and agree to comply with the requirements of this Mitigation Monitoring and Reporting Program (Summary and Mitigation Measures attached).

IN WITNESS WHEREOF, this declaration is hereby executed by the undersigned named legal owner(s) of the subject property on this ____ day of _____, 20____.

OWNER(S):

_____

(Print company, corporation, or organization name, if applicable)

_____ _____

(Print name and/or title above) **(Signature above)**

ALL PURPOSE ACKNOWLEDGEMENT

State of California
County of Sacramento

On _____ before me,
_____(name, title of officer), personally appeared:

_____,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____

Signature

CAPACITY CLAIMED BY SIGNER

O INDIVIDUAL(S) SIGNING FOR ONESELF/THEMSELVES

O CORPORATE OFFICER(S) _____ TITLE(S)

_____ COMPANY

O PARTNER(S) _____ PARTNERSHIP

O ATTORNEY-IN-FACT _____ PRINCIPAL(S)

O TRUSTEE(S) _____ TRUST

O OTHER _____ TITLE(S)

_____ TITLE(S)

_____ ENTITY(IES) REPRESENTED

_____ ENTITY(IES) REPRESENTED

TABLE OF MEASURES

PURPOSE AND PROCEDURES

Pursuant to Section 21081.6 of the Public Resources Code and Chapter 20.02 of the Sacramento County Code, a Mitigation Monitoring and Reporting Program has been established for the project entitled **WESTERVELT WILLIAMSON ACT AMENDMENT AND GRADING PERMIT (Control Number:** 2009-70005 and PLNP2009-APB-00051).

PURPOSE

The purpose of this program is to assure diligent and good faith compliance with the Mitigation Measures which have been recommended in the environmental document, and adopted as part of the project or made conditions of project approval, in order to avoid or mitigate potentially significant effects on the environment.

NOTIFICATION AND COMPLIANCE

It shall be the responsibility of the project applicant to provide written notification to the Environmental Coordinator, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The Department of Environmental Review and Assessment (DERA) will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program (MMRP). Any non-compliance will be reported to the project applicant, and it shall be the project applicant's responsibility to rectify the situation by bringing the project into compliance and re-notifying the Environmental Coordinator. Any indication that the project is proceeding without good-faith compliance could result in the imposition of administrative, civil and/or criminal penalties upon the project applicant in accordance with Chapter 20.02 of the Sacramento County Code.

PAYMENT

It shall be the responsibility of the project applicant to reimburse the County for all expenses incurred in the implementation of the Mitigation Monitoring and Reporting Program (MMRP), including any necessary enforcement actions. The MMRP fee for this project is **$5,000.00**. This fee includes administrative costs of **$600.00**, which must be paid to the Department of Environmental Review and Assessment **prior to recordation of the MMRP and prior to recordation of any final parcel or subdivision map. The remaining balance will be due prior to review of any plans by the DERA or issuance of any building or grading permits**.

RECORDATION

In order to record the adopted Mitigation Monitoring and Reporting Program with the County Recorder as required by Section 20.02.050(b)(2) of the Sacramento County Code, the project applicant shall provide to the Department of Environmental Review

and Assessment a Legal Description for the real property that is the subject of the project.

COMPLETION

Pursuant to Section 20.02.060 of the Sacramento County Code, upon the determination of the Environmental Coordinator that compliance with the terms of the approved Mitigation Monitoring and Reporting Program has been achieved, and that there has been full payment of all fees for the project, the Environmental Coordinator shall record and issue a Program Completion Certificate for the project.

PROPERTY TRANSFER

The requirements of this adopted Program run with the real property that is the subject of the project, as described in Exhibit A. Successive owners, heirs and assigns of this real property are bound to comply with all of the requirements of the adopted Program.

Prior to any lease, sale, transfer or conveyance of any portion of the real property that is the subject of the project, the record owner(s) at the time of the application for the project, or his or her successor's in interest, shall provide a copy of the adopted Program to the prospective lessee, buyer, transferee, or one to whom the conveyance is made.

PENALTIES

Chapter 20.02 of the Sacramento County Code permits administrative and civil remedies and criminal penalties to be imposed in the event of non-compliance with an adopted Mitigation Monitoring and Reporting Program. The civil and administrative remedies, which are found in Section 20.02.090 of the Sacramento County Code, include injunctive relief, holds on issuance of development entitlements including, but not limited to, building permits, building inspections or other construction inspections, and final acceptance of improvements associated with a project, stop work orders, fines for continuing or repeated non-compliance, revocation of any special permit granted concurrently with the approval of a Program, and the abatement of any resulting nuisance. The criminal penalties, which are found in Section 20.02.080 of the Sacramento County Code, include a fine not to exceed five hundred dollars or imprisonment in the County jail not to exceed six months, or both.

Plans that are inconsistent with the adopted Mitigation Measures will not be approved.

STANDARD PROVISIONS

Page one of all Project Plans must include the following statement in a conspicuous location:

"All Plans associated with this project are subject to the conditions of Mitigation Monitoring and Reporting Program 2009-70005 and PLNP2009-APB-00051 . For any questions regarding compliance with the MMRP document, contact MMRP staff at (916) 874-7914."

All Project Plans and any revisions to those Plans shall be in full compliance with the adopted Mitigation Monitoring and Reporting Program (MMRP). The project applicant shall submit one copy of all such Plans and any revisions to the Department of Environmental Review and Assessment prior to final approval by the Sacramento County Building Inspection Division (BID). If the Department of Environmental Review and Assessment determines that the Plans are not in full compliance with the adopted MMRP, the Plans shall be returned to the project applicant with a letter specifying the items of non-compliance, and instructing the applicant to revise the Plans, and then resubmit one copy of the revised Plans to the Department of Environmental Review and Assessment, for determination of compliance, prior to final approval by BID.

Additionally, the project applicant shall notify the Department of Environmental Review and Assessment **no later than 48 hours** prior to the start of construction and no later than 24 hours after its completion. The applicant shall notify the Department of Environmental Review and Assessment no later than 48 hours prior to any/all Final Inspection(s) by the County of Sacramento.

☐ MITIGATION MEASURE A: CONSTRUCTION-RELATED AIR QUALITY EMISSIONS

The following mitigation measures will reduce NOx and PM_{10} construction related emissions to a level of less than significant.

1. Prior to construction, the applicant shall provide to the SMAQMD a work plan that includes an inventory of the heavy duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project-wide fleet average 20 percent NO_x reduction and 45 percent particulate matter reduction compared to the most recent CARB fleet average at the time of construction.

   The work plan shall also include a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

2. The project shall ensure that exhaust emissions from all off-road diesel powered equipment used on the project site does not exceed 40 percent opacity for more than three minutes in any one hour. This test shall be performed by an ARB certified visible emissions evaluator. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and the lead agency and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations.

3. To mitigate construction-related particulate matter emissions, the following shall apply: keep soil moist at all times, maintain two feet of freeboard space on haul trucks, and use emulsified diesel or diesel catalysts on applicable heavy duty diesel construction equipment.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.

2. Monitor compliance during periodic site inspections of the construction work.

3. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

☐ MITIGATION MEASURE B: OAK TREE CONSTRUCTION PROTECTION

With the exception of the trees removed and compensated for through Mitigation Measure C, below, all native oak trees located adjacent to the proposed levee breech location and the stand of valley oak trees located in the southwestern portion of the site, which are 6 inches dbh or larger, on the project site, all portions of adjacent off-site native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. For the stand of valley oak trees this measurement shall be for the perimeter of the stand and measured from the trunk to the tip of the longest limbs of the outermost trees. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.

2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the oak trees prior to initiating project construction, in order to avoid damage to the trees and their root system. When areas under the tree canopy cannot be fenced, a temporary ground covering is required and shall cover the root zone and remain in place at the specified thickness until project activity within the root zone has been completed. The protective ground cover shall consist of shredded wood chips spread over the roots at a minimum of 6-inches in depth (keeping the trunk clear of chips), and layered by ¾-inch quarry gravel to stabilize the ¾-inch plywood sheets or steel plates laid on top.

3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support), or any other items shall be attached to the oak trees.

4. With the exception of driplines located along the existing levee road, no vehicles, construction equipment, mobile home/office, supplies, materials, or facilities shall be driven, parked, stockpiled, or located within the driplines of the oak trees.

5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the oak trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications, and irrigation management guidelines.

6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of oak trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be

tunneled or bored under the tree under the supervision of an ISA Certified Arborist.

7. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of the oak trees.

8. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees.

9. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".

10. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

11. Any fence/wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts to the trees.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.

2. Monitor compliance during periodic site inspections of the construction work.

3. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

☐ MITIGATION MEASURE C: RIPARIAN HABITAT

In order to compensate for the loss of 0.23 acres of riparian habitat located within the proposed Cosumnes River levee breech, the following mitigation is required:

1. Prior to the issuance of grading or other improvement permits, the applicant shall prepare a re-vegetation plan for the altered channel, consistent with General Plan Policies CO-62 and CO-112, that restores Cosumnes River riparian habitat. The plan shall include inch for inch replacement for the 189 inches of native oak tree loss based on a 3 acorn per inch loss ratio.

2. The re-vegetation plan shall be prepared by a qualified biologist or botanist and provide quantifiable success criteria and include at least a one year monitoring and adaptive management program. The plan shall be subject to the approval of the Department of Environmental Review and Assessment.

3. Any mitigation required by the state or federal permitting agencies that compensates for the loss of riparian vegetation, functions and values and that provides for a native re-vegetation plan consistent with or exceeding the requirements of measure 1 above shall be deemed mitigation sufficient to reduce impacts to a less than significant level and may be utilized in place of items 1 and 2 above.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.

2. Monitor compliance during periodic site inspections of the construction work.

3. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

☐ MITIGATION MEASURE D: PROTECTION FOR VALLEY ELDERBERRY LONGHORN BEETLE

If construction activities are to occur within 200 feet of onsite VELB habitat the following measures will be required in order to ensure that the habitat is not degraded.

1. Temporary construction fencing and flagging shall be installed at least 100 feet outside the edge of the driplines of the elderberry plants. In areas where encroachment on the 100-foot buffer has been approved by USFWS, provide a minimum setback of at least 20 feet from the dripline of each elderberry plant and provide documentation of USFWS approval of the reduced setback.

2. Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.

3. Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.

4. Instruct work crews about the status of the beetle and the need to protect its elderberry host plant.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.

2. Monitor compliance during periodic site inspections of the construction work.

3. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

☐ MITIGATION MEASURE E: SWAINSON'S HAWK AND OTHER RAPTORS NESTING HABITAT

If construction, grading, or project-related improvements are to occur between March 1 and September 15, a focused survey for Swainson's hawk and other raptor nests on the site and on nearby trees shall take place within ½ mile of the site, and shall be conducted by a qualified biologist within 14 days prior to the start of construction work (including clearing and grubbing). If active nests are found, the Department of Environmental Review and Assessment and the California Department of Fish and Game (CDFG) shall be contacted to determine appropriate protective measures. If no active nests are found during the focused survey, no further mitigation will be required.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.

2. Monitor compliance during periodic site inspections of the construction work.

3. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

☐ MITIGATION MEASURE F: SURVEYS FOR NESTING TRICOLORED BLACKBIRDS

If construction occurs between March 1 and July 31 pre-construction surveys for nesting tricolored blackbirds (TBB) shall be performed by a qualified biologist. Surveys shall include the project site and areas of appropriate habitat within 300 feet of the site. Surveys shall be conducted no less than 14 days and no more than 30 days prior to commencement of construction activities. The biologist shall supply a brief written report (including date, time of survey, survey method, name of surveyor and survey results) to the Department of Environmental Review and Assessment (DERA) prior to ground disturbing activity. If no TBB are found during the pre-construction survey, no further mitigation will be required. If an active TBB colony is found on-site or within 300 feet of the project site the project proponent shall do the following:

1. Consult with the California Department of Fish and Game (CDFG) to determine if project activity will impact the TBB colony(s). Provide the Department of Environmental Review and Assessment (DERA) with written evidence of the consult or a contact name and number from CDFG.

2. With CDFG permission, the applicant may avoid impacts to TBB by establishing a 300-foot temporary setback with fencing that prevents any project activity within 300 feet of the colony. A qualified biologist shall verify that setbacks and fencing are adequate and will determine when the colonies are no longer dependent on the nesting habitat (i.e. nestling have fledged and are no longer using habitat). The breeding season typically ends in July.

If TBB habitat is permanently destroyed, follow CDFG procedure to mitigate for habitat loss.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.

2. Monitor compliance during periodic site inspections of the construction work.

3. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

☐ MITIGATION MEASURE G: WETLANDS AND SURFACE WATER IMPACTS

In order to mitigate for impacts to 1.242 acres of seasonal wetland on the site, the following mitigation is required:

Prior to the approval of any grading permits for channel modifications, the project applicant or property owner shall obtain all applicable permits from the U. S. Army Corps of Engineers (USCOE) and shall pay to the County of Sacramento an amount based on a rate of $35,000 per acre if less than 1:1 replacement/compensation occurs through the Federal permitting process. Any payment due shall be collected by the Department of Planning and Community Development and deposited in the Wetlands Restoration Trust Fund. A copy of any required USCOE permits and verification of any required payment shall be submitted to the Department of Environmental Review and Assessment.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.

2. Monitor compliance during periodic site inspections of the construction work.

3. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

☐ MITIGATION MEASURE H: CULTURAL RESOURCES

Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914.

At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.

2. Monitor compliance during periodic site inspections of the construction work.

3. Participate in any Final Inspection(s) as necessary.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____