4.3 BIOLOGICAL RESOURCES

4.3.1 INTRODUCTION

This Biological Resources section of the Draft SEIR evaluates the biological resources known to occur or potentially occur within the proposed project site and assesses the effects of the proposed project on the biological resources of the County. Information for the section has been drawn primarily from the Yolo County General Plan¹ and associated EIR,² the Cache Creek Area Plan (CCAP) Update FEIR,³ the 1996 EIR,⁴ and the following project-specific reports:

- Proposed Hedgerow Restoration and Irrigation Plans (two exhibits), Zentner Planning and Ecology, January 27, 2023 (see Figures 4.3-4 and 4.3-5)
- Proposed Off-Channel Reclamation Plan for CEMEX Cache Creek, Yolo County, California, prepared by Cunningham Engineering, March 18, 2020 (Appendix D)
- Proposed Habitat Restoration Plan (HRP), CEMEX Cache Creek Mine, Yolo County, California, prepared by Zentner Planning & Ecology, October 2022⁵ (Appendix E)
- Proposed Reclamation Plan Narrative for the Cache Creek Mine, prepared by Compass Land Group, December 2020 (Appendix E)
- Zentner Planning & Ecology, Memo RE: Cache Creek Reclamation Phase 4 Restoration, August 25, 2020
- Zentner Planning & Ecology, Biological Resources Update, CEMEX Cache Creek Mine, February 22, 2018 (Appendix H)
- Zentner Planning & Ecology, Biological Resources Survey and Assessment, CEMEX Cache Creek Mine Phase 5 Area, July 12, 2022 (Appendix L)

Field reconnaissance surveys of the project site were conducted by the EIR biologist on June 13 and July 18, 2018, to confirm conditions described in the 2018 Biological Resources Update. The above data were reviewed, together with information on special-status species and sensitive natural communities available from the California Natural Diversity Data Base (CNDDB) of the California Department of Fish and Wildlife (CDFW), wetlands mapped as part of the National Wetland Inventory by the U.S. Fish and Wildlife Service (USFWS), the CNPS Online Inventory of

¹ Yolo County. 2030 Countywide General Plan. November 10, 2009.

² Yolo County. Yolo County 2030 Countywide General Plan Environmental Impact Report. SCH #2008102034. April 2009.

³ Yolo County. Cache Creek Area Plan Update Project, Final Environmental Impact Report. SCH #2017052069. December 2019.

⁴ Yolo County. 1996. Solano Long-Term Off-Channel Mining Permit Application Final Environmental Impact Report. November.

⁵ Zentner Planning & Ecology, 2022. Habitat Restoration Plan, CEMEX Cache Creek Mine. October 2022 (revised Figure 4, 11/18/2022).

²¹²⁰⁷⁻⁰¹

Rare and Endangered Plants of California, and Appendix A: Covered Species Accounts of the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP).⁶

Government agencies and the public were provided an opportunity to comment on the proposed project in response to the Notice of Preparation (NOP) that provided a preliminary summary of the proposed project. No written comments concerning biological resources were received by the County (NOP comment letters are included in Appendix B of this Draft SEIR). The following comments related to biological resources were expressed at the NOP public scoping meeting held on March 11, 2021, responses are provided in *italics*.

• Provide more information regarding reclamation to habitat and its overall schedule and success.

The proposed reclamation schedule is described in Chapter 3.0, the Project Description. Reclamation policies and regulations are summarized in subsection 4.3-3 below.

The following subsections describe the existing biological resources setting of the County and specifically in the lower Cache Creek area, the applicable regulatory framework, standards of significance used to determine potential environmental effects that may result from implementation of the project, identified impacts, and mitigation measures to reduce those impacts to a less-than-significant level, if applicable.

4.3-2 EXISTING ENVIRONMENTAL SETTING

The following setting information provides a brief summary of the conditions described in more detail in the above-referenced documents and includes updated information that has become available since those reports were completed.

Description of Regional Environment

With regard to biological resources, the regional environment has not changed substantially since the 1996 EIR. As noted in that document, grazing, agricultural production, and mining activities have substantially altered the vegetative cover on the project site and surrounding area along the lower Cache Creek corridor. The introduction of livestock grazing in the mid-1800s, followed by removal of oak woodlands, and eventual irrigation and year-round farming in the 1900s have resulted in the elimination of most of the native plant communities. In-channel aggregate mining and agricultural activities over the past century or more have resulted in substantial modification to the historic riparian cover along Cache Creek. Most of the original native riparian forest, oak woodland, and perennial native grassland communities have been replaced by agricultural crops, with remnants of the native communities generally limited to small segments along the creek and scattered mature oaks on the upper terraces. The CCAP Update EIR provides an updated discussion of the changes and trends in vegetation and wildlife habitat, sensitive natural communities and special-status species and other biological resources along the lower Cache Creek corridor planning area.

⁶ Yolo Habitat Conservation Plan/Natural Community Conservation Plan, Volume 1, Final. April 2018.

Description of Local Environment

As described in the 2018 Biological Resources Update report, the CEMEX site consists primarily of mining and agricultural land that is in various stages of mining, reclamation, and farming. Agricultural production on and around the site are mainly row crops. Riparian vegetation forms a relatively narrow band on the southern bank of Cache Creek (north side of the project site), which drops about 35 feet below the agricultural plain where mining is taking place. Remnant sections of riparian habitat remain in depressions within the required 200-foot buffer between the Creek and the mining pits. Annual grassland dominated by ruderal (weedy) species is found around the perimeter of the agricultural and actively mined areas as well as in much of the remnant buffer area.

The 1996 EIR provided a detailed description of the following resources:

- Vegetative cover and wildlife habitat consisting of agricultural crop and fallow fields, grassland, woodland, riparian corridor, and ornamental landscaping (1996 EIR, Draft volume, pages 4.6-4 through 4.6-8);
- Wetlands and Regulated Waters consisting of the Cache Creek corridor and a drainage through the southeastern portion of the site (1996 EIR, Draft volume, pages 4.6-8 through 4.6-10);
- Special-Status Species (1996 EIR, Draft volume, pages 4.6-10 through 4.6-15) see updated information below; and
- Rare or Unique Environmental Resources and Sensitive Natural Communities (1996 EIR, Draft volume, page 4.6-15) see updated information below.

Special-Status Species Update

Special-status species are plants and animals which are legally protected by the State and/or federal Endangered Species Acts⁷ or other regulations and other species which the scientific community and trustee agencies have identified as rare enough to warrant special consideration, particularly the protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. Species protected by the Endangered Species Acts often represent major constraints to development, particularly when they are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a "take"⁸ of these species.

⁷ The Federal Endangered Species Act (FESA) of 1973 declares that all federal departments and agencies shall use their authority to conserve endangered and threatened plant and animal taxa. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

⁸ The FESA defines "take" as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect" a threatened or endangered species. The USFWS further defines "harm" as including the killing or harming of wildlife due to significant obstruction of essential behavior patterns (i.e., breeding, feeding, or sheltering) through significant habitat modification or degradation. The CDFW also considers the loss of listed species habitat as "take," although this policy lacks statutory authority and case law support under the CESA.

Two sections of FESA contain provisions which allow or permit "incidental take". Section 10(a) provides a method by which a state or private action which may result in "take" may be permitted. An applicant must provide the USFWS with an acceptable conservation plan and publish notification for a permit in the Federal Register. Section 7 pertains to a federal agency which proposes to conduct an action that may result in "take," requiring consultation with USFWS and possible issuance of a jeopardy decision. Under the CESA, "take" can be permitted under Section 2081 of the Fish and Game Code. An applicant must enter into a habitat management agreement with the CDFW which defines the permitted activities and provides adequate mitigation.

Special-status species include:

- Officially designated (rare, threatened, or endangered) and candidate species for listing by the CDFW.
- Officially designated (threatened or endangered) and candidate species for listing by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NOAA Fisheries).
- Species considered to be rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act Guidelines, such as those with a rarity ranking of 1A, 1B, and 2 in the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California* (Inventory).
- And possibly other species which are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those with a rarity ranking of 3 and 4 in the CNPS Inventory or identified as "California Species of Special Concern" (SSC) by the CDFW. A SSC has no legal protective status under the state Endangered Species Act but are of concern to the CDFW because of severe decline in breeding populations in California, and other factors.

The 1996 EIR provided a discussion of the potential for special-status species and sensitive natural communities in the project vicinity, conclusion regarding presence or absence on the site, and recommendations for addressing potential adverse impacts. This was based on background studies conducted by the applicant's consulting biologists and other information sources, such as the records on occurrences of special-status species and sensitive natural communities maintained by the CNDDB. Because of the length of time that has passed since preparation of the 1996 EIR, the current records of the CNDDB were reviewed to determine whether any new occurrences of special-status species have been reported from the site or immediate vicinity. Figure 4.3-1 shows the occurrences of special-status plants and Figure 4.3-2 shows the occurrences of special-status animals within about five miles of the site.

As concluded in the 1996 EIR, no special-status plant species have been reported from or are suspected to occur on the site due to the extent of past and on-going disturbance from agricultural, mining, and bank stability modifications. These conditions haven't changed and there is no expectation that special-status plant species have become established on the site (2018 Biological Resources Update).

The 1996 EIR focused on the potential for presence of eight special-status animal species on the project site, as well as the several other bird species known to forage and possibly nest in the project vicinity. The eight focal species included: the federally-endangered valley elderberry longhorn beetle (*Desmocerus californicus* ssp. *dimorphus*) or VELB, the State-threatened bank swallow (*Riparia riparia*), the State-threatened Swainson's hawk (*Buteo swainsoni*), the State-threatened tricolored blackbird (*Agelais tricolor*), three bird species recognized as California SSC by CDFW at the time – burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), and northern harrier (*Circus cyaneus*) – and the State fully protected white-tailed kite (*Elanus caeruleus*). The status and varying potential for presence for each of these species on the site remains unchanged from that described in the 1996 EIR.

As indicated in Figure 4.3-2, no new occurrences for any of these eight species discussed in detail in the 1996 EIR have been reported on the project site. The only mapped occurrence on the site is from records of a bank swallow colony reported in 1987 from the gravel pit excavations on the Hutson parcel. This colony, associated with the gravel stockpile, no longer exists.

Numerous occurrences of Swainson's hawk have been reported in the surrounding area, and although no nests have been detected during annual monitoring by the applicant's consulting biologist, this species is known to forage in suitable habitat on the site. Elderberry host plants for VELB occur in the riparian habitat along the Cache Creek corridor as well as scattered locations across the site. Given that the site is located within the known range of VELB, all elderberry shrubs with trunk diameters of one inch or greater are considered potential habitat for this species by the USFWS according to the 2017 *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle.*⁹ Further discussion of these three species is provided below under Impact 4.3-1, Special-Status Species.

Suitable nesting habitat for the remaining four special-status bird species that were a focus in the 1996 EIR remains low, although suitable foraging habitat is present on the site. Pre-construction bird nesting surveys recommended as mitigation in the 1996 would address the potential for presence of nesting raptors (birds of prey). Impact 4.3-1 addresses this and avoidance of more common bird species that are also protected under the Migratory Bird Treaty Act and State Fish and Game Code when nests are in active use.

The 1996 EIR addresses the potential for foraging by pale big-eared bat (*Plecotus townsendii pallescens*), Townsend's western big-eared bat (*Plecotus townsendii townsendii*), and pallid bat (*Antrazous palida*) on the site and concludes essential roosting habitat is absent. The 1996 EIR does not address the potential presence of western red bat (*Lasiurus blossevillii*) on the site. Limited potential habitat for western red bat occurs within the areas of riparian woodland along Cache Creek, and possibly in scattered trees within the proposed mining area on the site. The 2018 Biological Resources Update report indicates the potential limited presence of this species. As indicated in Figure 4.3-2, a general occurrence of western red bat was reported in 1954 from a fig orchard in the Esparto area, about three miles west of the site. Western red bat is considered an SSC by CDFW and has a High Priority ranking by the Western Bat Working Group because of declines in population numbers and distribution. This species roosts in trees and shrubs adjacent to streams and open fields, particularly mature stands of cottonwoods and sycamores in riparian habitats, and has been observed roosting in agricultural trees in the Central Valley. Additional discussion of the potential impacts of the project on western red bat is provided below under Impact 4.3-1.

⁹ U.S. Fish and Wildlife Service. 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service; Sacramento, California.



SOURCES: California Natural Diversity Database accessed on August 9, 2022; Service Layer Credits: Copyright 92 2013 National Geographic Society, i-cubed. Map produced by www.digitalmappingsolutions.com on 8/9/2022.



Figure 4.3-2 Special Status Animals

SOURCES: California Natural Diversity Database accessed on August 9, 2022; Service Layer Credits: Copyright, 2013 National Geographic Society, i-cubed. Map produced by www.digitalmappingsolutions.com on 8/9/2022.

Sensitive Natural Communities Update

Sensitive natural communities are natural community types considered to be rare or of a "high inventory priority" by the CDFW. Although sensitive natural communities have no legal protective status under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA), they are provided some level of consideration under CEQA. The CNDDB provides an inventory of sensitive natural communities considered to have a "high inventory priority" in the State by the CDFW. CDFW ranks natural communities (also referred to by CDFW as "alliances") based on rarity rank, using a system derived from NatureServe's standard heritage program, as indicated in the *California Natural Community List*.¹⁰

As discussed in the 1996 EIR in the subsection on Rare or Unique Environmental Resources (1996 EIR, Draft volume, page 4.6-15), areas of riparian forest, scrub, and emergent wetlands along the Cache Creek corridor are considered to have a high inventory priority in the CNDDB and qualify as sensitive natural community types. These sensitive natural community types are also regulated as State waters because of their association with the riparian habitat of Cache Creek. Intact stands of valley oak woodlands also qualify as a sensitive natural community type, depending on their size, dominance by native valley oak, condition of understory, and other variables. However, the remaining valley oaks outside of the Cache Creek corridor on the project site are isolated trees along the margins of agricultural fields and don't qualify as a natural community type. These scattered valley oaks and other native trees are nevertheless important wildlife habitat features providing foraging opportunities and perching, roosting, and nesting opportunities for numerous species of birds, including raptors.

4.3-3 REGULATORY CONTEXT

The following is a description of federal, State, and local environmental laws and policies that are relevant to the review of biological resource impacts of the proposed project.

Federal Regulations

The CCAP Update FEIR provided descriptions of the Federal Endangered Species Act (FESA), Migratory Bird Treaty Act (MBTA), and Clean Water Act (CWA). There have been no substantive changes in these regulations as applicable to the proposed project since certification of the CCAP Update FEIR.

State Regulations

The CCAP Update FEIR provided descriptions of the California Endangered Species Act (CESA), the Streambed Alteration Agreement Process, the Natural Community Conservation Planning (NCCP) Act, California Special Concern Species, protection of raptors and birds, and the California Native Plant inventory. The 1996 EIR and CCAP Update FEIR included summaries of the Surface Mining and Reclamation Act (SMARA). There have been no substantive changes to these regulations as applicable to the proposed project since certification of the CCAP Update FEIR.

¹⁰ California Department of Fish and Wildlife, Biogeographic Data Branch, Vegetation Classification and Mapping Program, 2022. *California Natural Community List*. July 5.

Local Regulations

Since certification of the 1996 EIR, the County adopted the Yolo County Oak Woodland Conservation and Enhancement Plan in 2007, updated the Countywide General Plan in 2009, adopted the Yolo Habitat Conservation Plan/Natural Community Conservation Plan in 2019, and approved the CCAP Update in 2019. The CCAP Update FEIR provided descriptions of these and other relevant local plans and regulations. Further discussion is provided below.

2030 Countywide General Plan

The 2030 Countywide General Plan was updated in 2009 and contains the following goals, policies, and actions related to biological resources that are relevant to the proposed project:

- Goal CO-2: Biological Resources. Protect and enhance biological resources through the conservation, maintenance, and restoration of key habitat areas and corresponding connections that represent the diverse geography, topography, biological communities, and ecological integrity of the landscape.
- Policy CO-2.1: Consider and maintain the ecological function of landscapes, connecting features, watersheds, and wildlife movement corridors.
- Policy CO-2.3: Preserve and enhance those biological communities that contribute to the county's rich biodiversity including blue oak and mixed oak woodlands, native grassland prairies, wetlands, riparian areas, aquatic habitat, agricultural lands, heritage valley oak trees, remnant valley oak groves, and roadside tree rows.
- Policy CO-2.4: Coordinate with other regional efforts (e.g., Yolo County HCP/NCCP) to sustain or recover special-status species populations by preserving and enhancing habitats for special-status species.
- Policy CO-2.9: Protect riparian areas to maintain and balance wildlife values.
- Policy CO-2.10: Encourage the restoration of native habitat.
- Policy CO-2.14: Ensure no net loss of oak woodlands, alkali sinks, rare soils, vernal pools or geological substrates that support rare endemic species, with the following exception. The limited loss of blue oak woodland and grasslands may be acceptable, where the fragmentation of large forests exceeding 10 acres is avoided, and where losses are mitigated.
- Policy CO-2.17: Emphasize and encourage the use of wildlife-friendly farming practices within the County's Agricultural Districts and with private landowners, including:
 - Establishing native shrub hedgerows and/or tree rows along field borders.

- Protecting remnant valley oak trees.
- Planting tree rows along roadsides, field borders, and rural driveways.
- Creating and/or maintaining berms.
- Winter flooding of fields.
- Restoring field margins (filter strips), ponds, and woodlands in non-farmed areas.
- Using native species and grassland restoration in marginal areas.
- Managing and maintaining irrigation and drainage canals to provide habitat, support native species, and serve as wildlife movement corridors.
- Managing winter stubble to provide foraging habitat.
- Discouraging the conversion of open ditches to underground pipes, which could adversely affect giant garter snakes and other wildlife that rely on open waters.
- Widening watercourses, including the use of setback levees
- Policy CO-2.30: Protect and enhance streams, channels, seasonal and permanent marshland, wetlands, sloughs, riparian habitat and vernal pools in land planning and community design.
- Policy CO-2.34: Recognize, protect and enhance the habitat value and role of wildlife migration corridors for the Sacramento River, Putah Creek, Willow Slough, the Blue Ridge, the Capay Hills, the Dunnigan Hills and Cache Creek.
- Policy CO-2.36: Habitat preserved as a part of any mitigation requirements shall be preserved in perpetuity through deed restrictions, conservation easement restrictions, or other method to ensure that the habitat remains protected. All habitat mitigation must have a secure, ongoing funding source for operation and maintenance.
- Policy CO-2.38: Avoid adverse impacts to wildlife movement corridors and nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds). Preserve the functional value of movement corridors to ensure that essential habitat areas do not become isolated from one another due to the placement of either temporary or permanent barriers within the corridors. Encourage avoidance of nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds) during periods when the sites are actively used and that nursery sites which are used repeatedly over time are preserved to the greatest feasible extent or fully mitigated if they cannot be avoided.
- Policy CO-2.41: Require that impacts to species listed under the State or federal Endangered Species Acts, or species identified as special-status by the resource agencies, be avoided to the greatest feasible extent. If avoidance

is not possible, fully mitigate impacts consistent with applicable local, State, and Federal requirements.

- Policy CO-2.42: Projects that would impact Swainson's hawk foraging habitat shall participate in the Agreement Regarding Mitigation for Impacts to Swainson's Hawk Foraging Habitat in Yolo County entered into by the CDFG and the Yolo County HIP/NCCP Joint Powers Agency or satisfy other subsequent adopted mitigation requirements consistent with applicable local, State, and federal requirements.
- Policy CO-3.1: Encourage the production and conservation of mineral resources, balanced by the consideration of important social values, including recreation, water, wildlife, agriculture, aesthetics, flood control, and other environmental factors.
- Policy CO-5.8: Support efforts to reduce the accumulation of methyl mercury in fish tissue in Cache Creek and the Delta, as well as the consumption of fish with high levels of methyl mercury.

Off-Channel Mining Plan

The following goal and actions from the Biological Resources Element of the Yolo County Off-Channel Mining Plan (OCMP), revised and updated in 2019, are applicable to the proposed project:

- Goal 6.2-1: Provide for a diverse, native ecosystem within the OCMP area that is selfsustaining and capable of supporting native wildlife and invertebrate species.
- Action 6.4-2: Provide for the development of shallow areas along reclaimed off-channel excavations that extend below the groundwater level, to create wetland and riparian habitat. (See Section 10-5.529 of the Reclamation Ordinance.)
- Action 6.4-3: Mitigate for short-term and long-term loss of agricultural land and habitat pursuant to applicable County requirements and CEQA. Comply with the Yolo HCP/NCCP for species covered by that Plan. For non-covered species for which impacts may occur, ensure compliance with appropriate measures in site specific biological assessments required under the OCMP and CCRMP, in compliance with the State Fish and Wildlife Code, Migratory Bird Treaty Act, and other applicable regulations, plans and programs, as appropriate.
- Action 6.4-5: Include provisions to enhance habitat for special-status species in restoration components of reclamation plans, where feasible. (See Section 10-5.523 of the Reclamation Ordinance.)

- Action 6.4-7: Restore riparian habitat throughout the planning area, wherever appropriate. However, re-vegetative efforts should be primarily focused on implementing recommendations described in the Technical Studies and the subsequent Restoration Recommendations incorporated into the CCRMP. Integrate off-channel and in-channel revegetation plans with the goal of reducing fragmentation by expanding and connecting existing habitat patches, optimizing restoration planning in alignment with the Parkway Plan, and supporting future funding proposals. Ensure that elements such as soils, drainage, slopes, and habitat types complement one another in a coordinated effort.
- Action 6.4-8: Include native-planted hedgerows and other vegetated buffers between restored habitat areas and adjoining farmland, in order to minimize the potential for riparian areas to serve as harbors for predators and insect pests. These buffers will also reduce the noise, dust, and spraying generated by agricultural operations, in addition to providing valuable pollinator resources that in turn could enhance agricultural production.

Cache Creek Resources Management Plan

The following goal and actions from the Biological Resources Element of the Yolo County Cache Creek Resources Management Plan (CCRMP), revised and updated in 2019, are applicable to the proposed project:

- Goal 4.2-1: Provide for a diverse, native riparian ecosystem within the CCRMP area that is self-sustaining and capable of supporting native wildlife.
- Objective 4.3-2: Establish conditions to encourage the development of a variety of natural riparian habitat types within the CCRMP area in order to support biological resources associated with Cache Creek.
- Action 4.4-5: Establish a series of wildlife reserves (see Figure 9) to provide core areas for maximizing wildlife and fish habitat, to help protect areas of high-quality habitat from future degradation, and to provide source areas and wildlife nurseries from which native plants and wildlife can colonize other reaches of the creek. Wildlife reserves should emphasize the preservation of high-quality existing habitat, areas with high species diversity, areas supporting unique species or biotic communities, and habitat for rare, threatened, and endangered species.
- Action 4.4-6: Favor projects that establish native woody vegetation over emergent wetlands in appropriate areas within the planning area. Riparian forest and scrub habitats have largely disappeared regionally and are much more difficult to reestablish than are emergent wetland habitats. Emergent wetlands can also be established in a greater range of environmental conditions, whereas riparian woodlands require specific considerations in order to thrive.

- Action 4.4-10: Through development agreements with mining operations, require integration of in-channel revegetation plans in order to reduce fragmentation by expanding and connecting existing habitat patches, optimize restoration planning, and support future funding proposals. Ensure that elements such as soils, drainage, slopes, and habitat types complement one another in a coordinated effort. Coordinate in-channel habitat areas with proposed wildlife mitigation and "net gain" established as a part of the off-channel mining operations in order to create a larger riparian habitat area. Require consistency with the Parkway Plan.
- Action 4.4-11: Work with the aggregate industry to achieve multiple benefits, whereby habitat developed as a part of a reclamation plan may be dedicated for preservation to offset development projects elsewhere. Coordinate this effort with implementation of the Parkway Plan and the Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP).
- Action 4.4-12: Recommended planting procedures and materials, soil amendments and stabilizers, and appropriate species and planting densities for marshland, oak woodland, and riparian woodland restoration efforts should be performance based. Variations from these guidelines shall be acceptable if alternative restoration plans have been prepared by a qualified biologist and reviewed by the TAC, consistent with the policies of the CCRMP.
- Action 4.4-13: Avoid disturbance to important wildlife habitat features such as nest trees, colonial breeding locations, elderberry shrubs, and essential cover associated with riparian forest and oak woodland habitat. This should include sensitive siting of maintenance access and recreational facilities away from these features in accordance with the Migratory Bird Treaty Act and other applicable regulations.

Off-Channel Surface Mining Ordinance

Title 10, Chapter 4 of the Yolo County Code contains the Off-Channel Surface Mining Ordinance (Mining Ordinance), which provides the following requirements relevant to biological resources:

Section 10-4.418. Habitat Conservation Plan Compliance.

All surface mining operations shall be consistent with applicable components of the Yolo Habitat Conservation Plan/ Natural Community Conservation Plan (HCP/NCCP).

Section 10-4.429. Setbacks. [excerpt]

All off-channel surface mining operations shall comply with the following setbacks:

(f) Off-channel excavations shall be set back a minimum of twenty-five (25) feet from riparian vegetation; and...

Section 10-4.436. Vegetation Protection.

Existing vegetation and habitat to be retained shall be enclosed by temporary fencing to restrict access, protect against damage and/or provide buffers to reduce the impact of dust. Temporary fencing shall be a minimum of four (4) feet high. The disturbance of riparian forest or oak woodland vegetation, including identified offchannel vegetation, should be avoided if possible. Replacement habitat and plantings shall be established where complete avoidance is not possible, according to a habitat restoration plan prepared by a qualified biologist, consistent with the goals of this plan.

Section 10-4.440. Wildlife Habitat.

Avoid disturbance to important wildlife habitat features such as bird nesting trees, colonial breeding locations, elderberry host plants for Valley Elderberry Longhorn Beetle, and mature riparian forest and oak woodland habitat. This shall include sensitive siting of haul roads, trails, and recreational facilities away from these features. Suitable habitat for special-status species shall be protected and enhanced or replaced as a part of mitigation plans prepared by a qualified biologist where necessary, and through compliance with the Yolo HCP/NCCP for special-status species covered by that Plan. Mining and reclamation activities shall be performed in accordance with the State Fish and Wildlife Code, Migratory Bird Treaty Act, and other applicable regulations to protect bird nests when in active use.

Native-planted hedgerows and/or other vegetated buffers shall be included between restored habitat areas and adjoining farmland, in order to minimize the potential for riparian areas to serve as harbors for predators and insect pests. These buffers will also reduce the noise, dust, and spraying generated by agricultural operations, in addition to providing valuable pollinator resources that in turn could enhance agricultural production.

Section 10-4.502. Applications: Contents. [excerpt]

- (b) Site-specific technical reports, performed by qualified professionals in the appropriate area of expertise, shall provide specific proposals for inclusion in the surface mining permit to address the following potential environmental impacts:
 - (1) A biological inventory and analysis to evaluate the on-site habitat value of the proposed mined area, as well as the potential impacts to special-status species and sensitive natural communities, both on-site and within the immediate area. The analysis shall propose appropriate measures to reduce any potential adverse impacts to special-status species or significant suitable habitat and shall ensure compliance with the Yolo HCP/NCCP, California Fish and

Game Code, Migratory Bird Treaty Act, and other applicable regulations, plans and programs. The analysis shall also include a wetland delineation study for any potential on-site wetlands and shall provide adequate mitigation and appropriate authorizations from regulatory agencies, where required. If landscaping is proposed to screen the surface mining operations from adjoining public rights-of-way or public and private lands, the biological analysis shall include an evaluation of the feasibility of the species, weed control, and irrigation methods to be used;

Surface Mining Reclamation Ordinance

Title 10, Chapter 5 of the Yolo County Code contains the Surface Mining Reclamation Ordinance (Reclamation Ordinance), which provides the following requirements relevant to biological resources related to reclamation of mining sites:

Section 10-5.509. Fence Row Habitat.

Where fence row or field margin habitat previously existed, reestablish similar habitat as part of reclamation to agricultural use to replace and improve the wildlife habitat value of agricultural lands, allowing for the reestablishment of scattered native trees, shrubs, and ground covers along the margins of reclaimed fields. Reestablished habitat can be located in areas other than where it occurred originally. Restoration plans shall specify ultimate fence row or field margin locations, identify planting densities for trees and shrubs, and include provisions for monitoring and maintenance to ensure establishment. Restoration plans should be reviewed and approved by the TAC.

Section 10-5.514. Habitat Conservation Plan Compliance.

All reclamation plans shall be consistent with applicable components of the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP).

Section 10-5.515. Habitat Plan Referral.

Proposed habitat restoration or mitigation plans for lands within the OCMP area shall be sent to the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and other interested parties for review and comment through the CEQA process as applicable, to ensure that the projects do not conflict with other existing habitat enhancement efforts.

Section 10-5.523. Planting Plans.

Site-specific planting plans shall be developed by a qualified biologist for proposed habitat reclamation projects. Restoration components of reclamation plans shall include provisions to enhance habitat for special-status species, where feasible.

Native-planted hedgerows and other vegetated buffers shall be included between

restored habitat areas and adjoining farmland, in order to minimize the potential for riparian areas to serve as harbors for predators and insect pests. These buffers will also reduce the noise, dust, and spraying generated by agricultural operations, in addition to providing valuable pollinator resources that in turn could enhance agricultural production.

Section 10-5.533. Wetland Habitat.

Off-channel excavations that are proposed to be reclaimed to permanent lakes shall include riparian and/or wetland habitat. The creation of riparian and or wetland habitat along the perimeter of permanent lakes shall include appropriate features such as: scalloped basin perimeters with extended peninsulas, islands, and stepped benches of various widths at approximately three (3) foot vertical intervals both above and below the groundwater level. Where wetlands are not proposed, either grassland and/or woodland habitat, or agricultural fields separated from the lake by a berm, shall be established using only native species in order to provide continuous habitat value around the permanent lakes.

Yolo County Oak Woodland Conservation and Enhancement Plan

The Yolo County Oak Woodland Conservation and Enhancement Plan was prepared in 2007 by the Yolo County Parks and Natural Resource Division. The Plan is designed to promote the conservation and enhancement of the County oak woodlands through voluntary efforts of private land owners and public agencies, focusing on oak woodlands that cover one acre or more. The Plan includes oak woodland conservation policy recommendations and a checklist to help determine the resource value of existing oak woodlands.

Yolo Habitat Conservation Plan/Natural Community Conservation Plan

The Yolo HCP/NCCP is a 50-year countywide conservation plan that became effective in January of 2019. The HCP/NCCP protects endangered species and natural resources while allowing for orderly development in Yolo County consistent with local General Plans. The Yolo HCP/NCCP provides coverage for 12 special-status animal and plant species, as well as riparian and other wetland sensitive natural community types.

The process for participating in the Yolo HCP/NCCP includes a pre-application phase to confirm that the project is a covered activity, followed by a preliminary evaluation, and then a formal application. The formal application and coverage under the Yolo HCP/NCCP involves planning level surveys, payment of applicable fees based on quantified temporary or permanent impacts to land cover types for a particular site, and requires compliance with applicable pre-construction surveys and construction-related avoidance and impact minimization measures. An applicant can provide conservation land in lieu of paying a portion of the land cover fee or purchase mitigation credits from an approved mitigation bank in lieu of paying a portion of the fee.

4.3-4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the changes in the proposed project's potential impacts related to biological resources. A discussion of the project's impacts, as well as mitigation measures where necessary, are also presented.

Standards of Significance

The significance criteria used for this analysis were developed from Appendix G of the CEQA Guidelines, and applicable policies and regulations of Yolo County. A biological resources impact is considered significant if the proposed project would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS.
- c) Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- e) Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan;
- f) The project has the potential to substantially 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; or substantially reduce the number or restrict the range of an endangered, rare or threatened species.
- g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- h) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The standards of significance presented in the 1996 EIR are listed below. For each standard, there is information (*in italics*) describing how the standard from the 1996 EIR is addressed by the updated standards listed above. The 1996 EIR considered that the project would have a significant effect on biological resources if it would:

• Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources.

Impacts associated with fragmenting, eliminating or disrupting animal habitat are addressed by criteria "a", "d" and "f" above.

• Substantially limit or fragment range and movement (geographic distribution of animals and/or seed dispersal routes).

Impacts associated with limiting or fragmenting the range or movement of animals or seed dispersal are addressed by criteria "a", "d" and "f" above.

• Disrupt critical time periods (nesting, breeding) for fish and other wildlife species.

Impacts associated with disrupting nesting or breeding activities or habitat are addressed by criteria "d" and "f" above.

• Reduce the numbers of any rare, threatened, or endangered species or their habitats (including, but not limited to, the removal of any healthy oak tree or tree containing Swainson's hawk nests).

Impacts associated with reducing the numbers of any rare, threatened, or endangered species or their habitats are addressed by criteria "a" and "f" above.

• Substantially impact locally designated species or locally designated natural communities.

Impacts associated with a substantial impact on locally designated species or natural communities are addressed by criteria "b", "f", and "g" above.

• Remove wetland habitat (e.g., marsh, riparian, and vernal pool).

Impacts associated with an adverse effect on wetland habitat are addressed by criterion "c" above.

Impacts Identified in the 1996 EIR

The impacts identified in the certified 1996 EIR are summarized in Table 4.3-1. The table provides a discussion of the status of each mitigation measure.

No.	Impact Statement from 1996 EIR	Mitigation Measures and Discussion
4.6-1	Project implementation would result in approximately 598 acres of primarily agricultural cover, revegetation of disturbed areas, and enhancement of native habitat. This is considered to be a less-than- significant impact on general vegetation resources.	No mitigation measures were required. The 1996 EIR refers to a 598-acre mining area. The executed Development Agreement refers to a 586-acre mining area. Neither of these acreages includes the 100-acre Hutson parcel (for which mining was concluded but reclamation would occur) or the 30-acre plant site (which was amended into the plans in 2003). As explained in Chapter 3.0, Project Description, this Draft SEIR relies on acreages as described in the executed Development Agreement. As approved the mining area is 586 acres and the reclamation area is 716 acres. As proposed the mining area is

Table 4.3-1: 1996 EIR Impact Statements, Mitigation Measures, and Discussion

		substantively unchanged and the reclamation area is expanded to 816 acres which includes disturbed areas along the northern boundary of the project site.
4.6-2	Grading in the proposed mining area would result in the loss of mature oaks and could result in inadvertent disturbance to remnant	Mitigation Measure 4.6-2a/Condition of Approval No. 51 ^a requires:
	sensitive natural communities along the Cache Creek corridor. This is considered to be a significant impact.	"Figure 8 of the HRP shall be revised to indicate the location of hedgerow plantings, around the Hutson parcel in Phase 1 or as specified as part of habitat enhancement in a Section 2081 permit if required by the CDFG, or to mitigate as a 1:1 ratio the actual loss of fence row habitat (Mitigation Measure 4.6-2a)."
		An addendum to the 1995 HRP was submitted to staff on April 24, 1997. The addendum HRP indicates the location of 2.7 acres hedgerow plantings around the north and west border of the Hutson Parcel, which was required to mitigate for the loss of hedgerow plantings in Phase 1 on the Farnham West Parcel.
		In information provided as a component of the 2022 Minor Modification (ZF #2022-0037), the applicant indicated that between 1997-2002, CEMEX's predecessors implemented ± 2.7 acres of hedgerow habitats north of Phase 1. Over time, the natural recruitment of vegetation has increased the vegetative cover in this area to ± 3.0 acres (see Figure 4.3-3).
		Because CEMEX has not actively maintained this area, the 2022 Minor Modification included two new relevant conditions of approval:
		4. Implement hedgerow planting to provide required vegetative cover within a continuous uninterrupted band along the north boundary of the west half of Phase 1 and the entire west boundary between Phase 1 and Phase 2. The width of the new hedgerow planting shall match the width of the existing hedgerow plantings on the north. If the PG&E powerline easement prohibits the planting of species identified for the rest of the hedgerow, alternative native species may be proposed for the powerline easement right-of-way area. The design shall be approved by the County with input from the Cache Creek Area Plan Technical Advisory Committee's Riparian Biologist. The applicant shall submit design plans (including proposed native species and irrigation) for County review and approval no later than September 30, 2022. All approved improvements shall be

implemented within 90 days of County approval.
5. Throughout the life of the mining and reclamation approvals, the applicant shall annually monitor and actively maintain the hedgerows.
Draft hedgerow design plans were submitted January 27, 2023 and have been reviewed by the County in the context of the subject Major Modification application.
In October of 2023 Cemex informed the County, based on information provided by their biologists Zentner Planning & Ecology, that the ±3.0-acre area of hedgerows was mistakenly characterized and should instead be considered "riparian" restoration. In examining applicant compliance with prior approvals, the Minor Modification analysis relied on the applicant's previous characterization of this area as hedgerows. However, the County has subsequently determined that because no acreage credit was given for the 3.0 acres as part of the Minor Modification consideration, the error does not materially change the Minor Modification approval or conditions. Implementation of Minor Modification Condition of Approval #4 identified above will result in the creation of a larger area of hedgerows, including restoration of the subject 3.0 acres within the larger hedgerow area, thus rectifying the error. Minor Modification Condition #4 is modified and carried forward in Mitigation Measure 4.3-6a. Other required modifications to the applicant's proposed hedgerow plans are also identified in Mitigation Measure 4.3-6a
Mitigation Measure 4.6-2b/Condition of Approval No. 52 ^a requires:
"Mature oak trees at the fringe of mining areas shall be preserved. These shall include: the two oaks at the southwestern corner of the mining area on the Solano West parcel in Phase 7; the two oaks at the southeastern corner of the mining area along the boundary between the Farnham West and Hutson parcels on Phase 1; and the single oak at the southeastern edge of the mining area on the Snyder East parcel in Phase 4. Stockpiling of topsoil and overburden in the vicinity of these five trees shall be restricted to beyond the tree driplines. As required by Section 10-4.436 of the County Off-Channel Mining Ordinance

	temporary fencing shall be provided around the dripline of these trees to prevent possible construction-related damage. Fencing shall remain in place until stockpiles are removed, and the surrounding lands are returned to agricultural production (Mitigation Measure 4.6-2b)."
	The two oaks at the southwest corner of Phase 7 remain and fall outside of the project area with the elimination of Phase 7. The two oaks at the southeast corner of the project area between Farnham West and Hutson in Phase 1 have been removed. The single oak at the southeast edge of Snyder East parcel (originally Phase 4) has been removed. Temporary fencing has been installed around the dripline of trees adjacent to Phase 4 to prevent possible construction-related damage.
	The applicant has indicated (correspondence to CEMEX from Zentner Planning and Ecology, August 22, 2018) that extreme heat and drought events over the last 25 years, particularly in last ten years, resulted in the death of a number of trees and shrubs. The bulk of the tree loss was on the margins of Cache Creek near the toe of the creek bank where vegetation became conditioned to a relatively high-water table. The drought lowered that water table significantly, leading to vegetation die-off along the margins of the creek channel and the toe of the creek banks. The other habitat areas impacted by the drought were the riparian depressions along the creek buffer. These depressions had been buffered from moderate drought because water ponded within nearby depressions. However, in the longer and more extreme droughts experienced over the last few years, these areas remained much drier throughout the winter and spring leading to tree loss.
	The proposed HRP will result in significant native tree planting throughout 174 acres of proposed reclaimed habitat.
	Mitigation Measure 4.6-2c/Condition of Approval No. 53 ^a requires:
	"As required by Section 10-4.436 of the County Off-Channel Mining Ordinance, temporary fencing shall be installed at the boundary of the habitat restoration area along the Cache Creek corridor, prior to initiation of any mining activity for each phase of the project. The fencing shall remain in place throughout the duration of

active mining until reclamation has been completed for each project phase (Mitigation Measure 4.6-2c)."
The 5.7-acre restored habitat area is shown on Figure 4.3-3. Protective fencing is in place and actively maintained by the applicant. Fencing and other resource protection controls will continue to be used over the course of mining in accordance with the required mitigation.
The 2022 Minor Modification included two new conditions of approval relevant to this restored habitat area:
6. Throughout the life of the mining and reclamation approvals, the applicant shall annually monitor and actively maintain the 5.7 acres of restored habitat.
7. The applicant was required under the 2081 MOU to dedicate the Restored Habitat property to the County in fee title no later than 1998. To address this outstanding commitment, the applicant shall make an irrevocable offer of dedication (IOD) to the County no later than September 30, 2022 (with a deadline for acceptance by the County no earlier than August 11, 2027, which is coincident with the expiration of the approved permits) to dedicate to the County, in fee title, the fenced restored habitat area totaling 5.7 acres, including ongoing maintenance to the County's satisfaction until the dedication is executed. If the current approved permits are extended, as requested in the pending Major Modification application, the deadline for acceptance of the IOD shall be extended to align with the new permit expiration or other equivalent assurances of future dedication (e.g., amendment of this commitment into the revised Development Agreement) on a timetable acceptable to the County shall be made. The parties agree the deadline for acceptance of the IOD, and discussion of connecting this property to subsequent trail easement dedications and/or substituting this property for other equivalent land that is connected to future land dedications, shall be discussed in concert with Development Agreement negotiations pertinent to the pending Major Modification.
The IOD has not been completed as of March 1, 2024.

		Mitigation Measure 4.6-2d/Condition of Approval No. 54 ^a requires:
		"Levee and channel stabilization improvements shall be designed to avoid impacts to riparian habitat on the site. Levee improvements on the Snyder East and West parcels in Phases 3, 5, and 6 shall be set back from the edge of the upper terrace to eliminate fill slopes which would extend into the riparian habitat. The project design shall be revised to provide a biotechnical bank protection design to replace the replacement of rip rap on that section of the south bank of Cache Creek extending 1,500 feet downstream from the I-505 bridge, unless engineering evaluations demonstrate that rip rap must be used at certain locations to control severe erosion (Mitigation Measure 4.6-2d)."
		The County has determined the plan revisions and improvements required by this condition were completed. Maintenance and monitoring are ongoing.
		Mitigation Measure 4.6-2e/Condition of Approval No. 55) ^a requires:
		"The HRP shall be revised to include provisions to remove tamarisk and giant reed from the site as part of the creek restoration effort and to modify restoration plans for the in-channel depression north on the Snyder East parcel in Phase 6 to enhance the existing riparian woodland rather than establishing seasonal marsh at this location (Mitigation Measure 4.6- 2e)."
		A revised restoration plan was submitted April 27, 1997. The improvements required by this condition were subsequently completed. Maintenance and monitoring are ongoing. As a part of the proposed project, CEMEX has proposed a permit modification which includes a Weed Control Plan.
4.6-3	Mining and reclamation activities would disturb existing wildlife habitat and	Mitigation Measure 4.6-3a/Condition of Approval No. 56 ^a requires:
	of limited habitat value. This is considered to be a significant impact.	"At least one permanent island shall be created on one of the permanent lakes to improve their wildlife habitat value. The artificial islands and submerged peninsulas described in the HRP shall be retained on all lakes. Characteristics of the permanent island shall include the following:

		a. The elevation of the island shall extend a minimum of five feet above the average high groundwater level (approximately 125-foot elevation) to prevent complete inundation during the winter months. Slopes of the island shall not exceed 3:1 above the average low groundwater level.
		b. The channel of water separating the island from the mainland shall have a minimum distance of 20 feet and a depth reaching at least 5 feet during the average summer low groundwater level to prevent predators from wading to the island during the summer months. A temporary levee to permit vehicle access and maintenance of restoration plantings on the island shall be included in the design, but the levee shall be removed following completion of the minimum five year monitoring program for the restoration effort.
		c. The island shall be revegetated according to the HRP, with perennial marsh at the lowest elevations and low terrace riparian species up to the average high groundwater level, with a cover of grassland and scattered shrubs provided over the top of the island (Mitigation Measure 4.6-3a)."
		The plan revisions required by this condition were completed but the approved 1995/1997 HRP does not address vegetation of the island. Lake island design is addressed in the proposed HRP and analyzed below under Impact 4.3-4 and Mitigation Measure 4.3-4c.
		Mitigation Measure 4.6-3b/Condition of Approval No. 57 ^a requires:
		"The unique bluff habitat between the upper terrace and the existing haul road on the Snyder East parcel in Phase 6 shall be preserved. Mitigation Measure 4.3-4a of the Final EIR for the proposed project provides appropriate mitigation for this impact (Mitigation Measure 4.6-3b)."
		The bluff habitat (see Figure 4.3-3) has not been disturbed. There will be no mining within 100 feet of the area, as a result of changes to the channel boundary and the 200-foot mining setback. The bluff will be preserved and dedicated to the County upon the completion of reclamation and the release of financial assurances for what is now Phases 4 and 5.
4.6-4	Mining activities and aspects of the proposed reclamation would result in the loss of	Mitigation Measure 4.6-4a/Condition of Approval No. 58 ^a requires:

	suitable foraging habitat for Swainson's hawk. This is considered to be a significant impact.	"A CDFG Code Section 2081 authorization, or the posting of a reclamation bond or letter of credit naming CDFG as the beneficiary, or other alternative mechanism acceptable to CDFG, shall be executed prior to commencement of mining (Mitigation Measure 4.6-4a)."
		A 2081 authorization was executed between the Operator and the California Department of Fish and Wildlife in July 1997. This easement was accepted as also providing mitigation for impacts to Swainson's hawk foraging land.
		Impact 4.3-1 and Mitigation Measure 4.3-1a and b require the applicant to: a) demonstrate to the satisfaction of County Counsel that the authorization was appropriately conveyed from the executing parties to CEMEX; and, b) demonstrate to the satisfaction of County Counsel whether the authorization terminates when the original permit would have terminated in on August 11, 2027, resulting in need for reauthorization or carries through the life of the mining and reclamation activities (including implementation of the Habitat Restoration Plan if a 20-year extension is granted.
4.6-5	Mining activities would affect suitable habitat for special-status species, such as valley	Mitigation Measure 4.6-5a/Condition of Approval No. 59 ^a requires:
	elderberry longhorn beetle, bank swallow, and other species of concern. This is considered to be a significant impact.	"The proposed HRP shall be revised to include specific provisions to ensure compliance with the USFWS "General Compensation Guidelines for the Valley Elderberry Longhorn Beetle." This shall include measures to: protect all elderberry shrubs to be retained; transplanting shrubs that cannot be avoided; planting replacement elderberry seedlings and associated riparian vegetation at appropriate ratios; and defining short and long-term maintenance, monitoring, and protection methods for the designated mitigation areas. A pre-construction survey for elderberry shrubs shall be performed by a qualified biologist prior to commencement of mining. The survey shall serve to confirm previous mapping of elderberry locations and determine whether any new shrubs have become established within the new mining area for which protection or replacement should be provided. The results of the survey shall be submitted to the USFWS as a report summarizing the purpose, findings, and recommendations consistent with the provisions of the revised HRP. All elderberry shrubs to be retained shall be

to preclude possible damage or loss of shrubs (Mitigation Measure 4.6-5a)."
The elderberry shrub survey was completed in 1997. An addendum to the 1995 HRP including the above requirements was submitted to the County on April 24, 1997. Implementation is ongoing.
CEMEX flagged the elderberry shrubs in the field on November 18, 2021. Fencing has not been installed. CEMEX proposes to avoid the shrubs with a 100-foot setback by adjusting the limits of mining as reflected in the proposed mining plans for Phase 3 (see Mining Sheet M-05).
Mitigation Measure 4.6-5b/Condition of Approval No. 60 ^a requires:
"Implement the performance standard included in Section 10-4.433 to prevent the inadvertent take of bank swallows (Mitigation Measure 4.6- 5b)."
Stockpiles are limited to 40 feet in height and a 2:1 slope to preclude use by bank swallows. Compliance with this is verified annually during County inspections.
Mitigation Measure 4.6-5c/Condition of Approval No. 61 ^a requires:
"The HRP shall be revised to include specific provisions to replace the artificial bank swallow nesting habitat created by past mining activities on the Hutson parcel. These provisions shall include design, construction, and maintenance activities necessary to implement one or more of the following options: establishing suitable nesting habitat on designated side slopes of the permanent lakes, replicating conditions on the Hutson parcel in Phase 1 at a new location; restoring the vertical bluffs above the mining- related riparian habitat in the northern portion of the Snyder East parcel in Phase 6; and/or creating and perpetuating a vertical bank along a designated segment of the active channel of Cache Creek (Mitigation Measure 4.6-5c)."
The bluff habitat has been restored as required and continue to provide important cliff habitat for bank swallows. Some of the areas have become heavily vegetated over time and are used less frequently by bank swallows while other areas have fresh erosion scars, with near vertical banks that are still actively used by the

	bank swallows (Year 25 Habitat Monitoring Report, Zentner, October 26, 2022).
	Mitigation Measure 4.6-5d/Condition of Approval No. 61.5 ^a requires:
	"A pre-construction raptor survey shall be conducted by a qualified wildlife biologist prior to initiation of mining to determine the presence or absence of active raptor nests which could be disturbed or lost within the new mining area. The results of the survey shall be submitted to the CDFG as a report summarizing the purpose, findings, recommendations, and status of any nests encountered. Elements of the pre-construction nesting survey and construction restrictions shall include the following:
	 Conduct the survey 30 days prior to any grading or other habitat modifications if proposed during the breeding season for tree nesting raptors (from March 1 through August 15). Confirmation surveys on presence or absence of burrowing owl ground nesting colonies shall be required prior to initiation of a particular phase of mining at any time of year to ensure absence of any resident owls.
	 If an active raptor nest is encountered, establish an appropriate buffer around the nest location, as determined in consultation with representatives of CDFG. The perimeter of the buffer zone shall be flagged in the field at 50-foot intervals, and all construction activities, including grading, tree removal, equipment storage, and stockpiling of soils, shall be prohibited within this buffer zone.
	 Prohibit construction activities within the designated buffer zone until the consulting wildlife biologist has determined that breeding was unsuccessful, that the young have fledged from the nest, or that a CDFG-approved relocation plan has been successfully implemented.
	• Prohibit construction activities, including removal of any nest tree or burrow, within the designated buffer zone unless written confirmation from the wildlife biologist on the status of nesting activity has been submitted in writing to CDFG (Mitigation Measure 4.6-5d)."

		Mitigation for loss of hawk foraging was addressed with the 2081 requirement (Condition of Approval No. 58) which is fulfilled. The applicant remains subject to survey requirements by phase to avoid impacts to protected species.
		A survey for raptor and other native bird nests in active use was conducted prior to mining under the short-term permit and no nest sites were discovered. A survey was completed for Phase 2 in the Spring of 1997 by Zentner and Zentner. No nest sites were discovered. A survey for Phase 3 was completed in October 1999 and included in the 1999 Annual Compliance Report. A pre-construction survey for Phases 4 and 5 was completed in September 2002. No listed species were found on site. The Operator has not yet commenced mining in Phases 6 or 7. Additional surveys will be conducted per the terms of the condition to ensure no impacts to nests as a result of approved activities. Updates to this condition are required in Mitigation Measure 4.3-1c.
		Condition of Approval No. 12 of the 2022 Minor Modification (ZF #2022-0037) requires:
		"In compliance with approved mining and reclamation permit conditions 59 and 61.5 the applicant shall engage the services of a qualified biologist to undertake a biological resources assessment of the new (renumbered) Phase 5 area prior to commencement of mining in that phase. Results shall be presented to the County demonstrating no impacts to special status species."
		The Phase 5 Biological Resources Assessment was submitted to the County in July 2022 and is included as Appendix L of this Draft SEIR.
		A condition of approval is proposed requiring future surveys to be in compliance with applicable HCP/NCCP Avoidance and Mitigation Measures.
4.6-6	Proposed mining and reclamation activities would affect jurisdictional wetlands or other waters of the United States. This is	Mitigation Measure 4.6-6a/Condition of Approval No. 62 ^a requires:
	considered to be a significant impact.	Channel bank modifications shall be coordinated with the U.S. Army Corps and California Department of Fish and Game. If required by jurisdictional agencies, appropriate authorization to modify jurisdictional babitat

	shall be obtained prior to grading or other
	maalificationa llas of bistochuisal bould
	modifications. Use of biotechnical bank
	protection design methods shall be
	protection design methods shall be
	encouraged where bank stabilization is
	required auch as the compart of active precien
	required, such as the segment of active erosion
	on the Kaupke parcel north of Phase 2
	(Mitigation Measure 4.6-6a) "
	(ivilligation ivieasure 4.0-0a).
	All required channel bank modifications have
	All required channel bank mounications have
	received required agency approvals/permits
	and have been constructed. This condition is
	and have been constructed. This condition is
	implemented and fully discharged with respect
	to known conditions Implementation is
	ongoing with respect to subsequent identified
	conditions and future relocation of drainages
	as discussed further under impact 4.3-3.

^a County of Yolo, 2021. Conditions of Approval Mining Permit and Reclamation Plan No. ZF #95-093 CEMEX Mining and Reclamation Project. 2020 Ten-Year Permit Review. As modified through February 11, 2021.

Impacts and Mitigation Measures for the Proposed Project

The discussion below examines relevant substantial changes in the project, substantial changes in the circumstances under which the project will be undertaken, and/or new information of substantial importance as defined by CEQA Guidelines Section 15162. As necessary, this document updates or expands upon impact discussions in the 1996 EIR to evaluate changes associated with the proposed project and describes whether new or revised mitigation is required.

Pursuant to Section 15162 of the CEQA Guidelines, a subsequent EIR is required where proposed changes in the project or changes in the circumstances of the project would require revisions of the previous EIR due to new significant environmental effects or a substantial increase in the severity of previously identified effects. Additionally, a subsequent EIR is required where there is new information that identifies significant effects not previously discussed, significant effects examined in the prior EIR that will be substantially more severe than previously shown, or mitigation measures or alternatives that are now feasible after previously being found infeasible or are considerably different from those previously analyzed, that would substantially reduce significant effects but the applicant declines to adopt. Each impact is analyzed to determine whether any of the requirements for a subsequent EIR are met and, if so, additional environmental analysis is provided to evaluate the impacts, mitigation measures, and alternatives, as appropriate.

Impact 4.3-1: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. The impact would be *significant*.

As discussed in the 1996 EIR, approved project activities would result in potential impacts on special-status species, including Swainson's hawk, VELB, bank swallow, and nesting raptors. Under the proposed project the phasing and extent of these impacts may differ, although the overall impact is generally the same. In general, mitigation measures and conditions of approval indicated in Table 4.3-1 would continue to effectively mitigate project impacts. Some updating is

necessary to reflect current standards and guidance. Potential impacts on each of these species remains potentially significant as summarized below.

Swainson's Hawk. As noted earlier, in satisfaction of Mitigation Measure 4.6-4a from the 1996 EIR and Condition of Approval No. 58, a 2081 authorization was executed between the original operator (Solano Concrete) and CDFW in July 1997. This authorization and a resulting conservation easement were accepted as also providing mitigation for impacts to Swainson's hawk foraging habitat. The 2081 authorization (or CESA MOU) includes the following provisions relevant to assignment, amendment, and the term of the agreement:

10.0 ASSIGNMENT

Any sale or assignment of this CESA MOU or any of the rights or obligations hereunder is void absent the written consent of the Parties; provided, however, that no consent shall be required for assignment or pledge made by Solano Concrete (a) to any company that shall succeed by purchase, merger or consolidation to the properties of Solano Concrete; or (b) as security for a debt under the provision of any mortgage, deed of trust, indenture, bank credit agreement, or similar instrument.

14.0 FURTHER ACTIONS

From time to time, the Parties shall by mutual agreement execute such instruments and other documents, and take such other actions, as may be reasonably necessary to carry out the terms of this CESA MOU. This CESA MOU cannot be amended or modified in any way except by a written instrument duly executed by the Parties.

15.0 TERMINATION

This CESA MOU shall terminate 30 years from the date of execution or upon completion of all terms and conditions; provided, however, that the measures contained herein and in the Mitigation Plan shall not apply to any Project parcel that is not mined and remains in its current use.

Additional information is needed for the County to confirm that the 2081 authorization was properly conveyed to CEMEX from the executing parties, whether amendment of the authorization is required to reflect the proposed project, and/or whether the authorization will terminate 30 years from execution which would be September 24, 2027, or may be continued in some manner in order to continue to rely upon it for purposes of the proposed project.

Should new "take" authorization be required, coverage under the Yolo HCP/NCCP, including implementation of relevant avoidance and minimization measures, may be required. The Yolo HCP/NCCP was approved in 2019, and Swainson's Hawk is one of 12 covered species in that plan. Mining under the CCAP is a covered activity under the Yolo HCP/NCCP.

Bank Swallow. Mitigation Measures 4.6-4a (Condition of Approval No. 58), 4.6-5b Condition of Approval No. 60), and 4.6-5c (Condition of Approval No. 61) from the 1996 EIR and permit approval satisfy mitigation requirements for potential impacts to bank swallow. The Vertical Bluff Habitat north of the Snyder East parcel is preserved and protected from mining and reclamation activities. Revisions to Condition of Approval No. 61.5 are identified below to ensure that preconstruction surveys for nesting birds address the potential for new nesting colonies on the site that could be affected by grading and other habitat modifications under the proposed project

Valley Elderberry Longhorn Beetle (VELB). Mitigation Measure 4.6-5a (Condition of Approval No. 59) calls for compliance with the USFWS "General Compensation Guidelines for the Valley Elderberry Longhorn Beetle" in providing compensatory mitigation for impacts on VELB habitat. Elderberry shrubs, which serve as the larval host for VELB, could still be affected by continuing activities at the site under the proposed project, and this measure would ensure potentially significant impacts are addressed. However, the USFWS updated these general compensation guidelines in 2017, which are now referred to as the *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*. To avoid unknown future impact, required pre-construction surveys for each phase should follow the updated framework. Revisions to COA #59 are identified below to address this.

Nesting Birds. Mitigation Measure 4.6-5d (Condition of Approval No. 61.5) calls for conduct of pre-construction surveys to confirm presence or absence of nesting raptors that could be affected by mining and other activities. Though implied, this mitigation measure does not specifically address the potential for nesting by other native bird species, active nests of which are also protected under the Migratory Bird Treaty Act and State Fish and Game Code. Without pre-construction surveys and appropriate avoidance setbacks while nests are in active use, this could be a potentially significant impact of the proposed project. Revisions to COA #61.5 are identified below to address this potentially significant impact on native birds.

Western Red Bat. Trees on the project site could be used as roosting by western red bat, and other species of special-status bats. Western red bat roosts in trees and shrubs adjacent to streams and open fields and in the Central Valley have been found in trees in agricultural areas. Limited potential habitat occurs within the riparian woodland along Cache Creek, and possibly in scattered trees within the proposed mining area on the site.

Individual bats could be injured or killed if project controls are not taken in advance of tree removal, which would be a significant impact given the special-status of this species. Preconstruction surveys to confirm presence or absence of roosting bats, as identified below, would address this potentially significant impact on possible roosting habitat. Sufficient alternative roosting habitat is present along the Cache Creek corridor and other locations on the site, and no compensatory mitigation is required for loss of potential habitat.

Conclusion

As presented above, there are proposed changes in the project related to the proposed 20-year extension of the permit and the validity of the 2081 MOU that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore revisions to the analysis in the 1996 EIR are required related to this area of impact.

As presented above, there are also changes in the circumstances under which the project would be undertaken that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore revisions to the analysis in the 1996 EIR are required related to this area of impact. These changes relate to: 1) updated references to applicable mitigation regulations, frameworks, and practices; and 2) effects on additional special status bat species.

There is no new important information relevant to this area of impact that was not previously known at the time of the 1996 EIR. There are no related new significant impacts, more substantial increase in the severity of previously identified significant impacts, previously dismissed mitigation that is now feasible, previously dismissed alternatives that are now feasible, or different more effective alternatives that have emerged or become known.

Implementation of Mitigation Measures identified below would reduce this impact to a less-thansignificant level.

Mitigation Measure 4.3-1a

To demonstrate that potential impacts on Swainson's hawk and bank swallow foraging habitat are adequately mitigated, the applicant shall:

a. Demonstrate to the satisfaction of County Counsel that the 2081 authorization was appropriately conveyed from the executing parties to CEMEX; and,

b. Determine to the satisfaction of County Counsel whether the 2081 authorization will terminate, require amendment, require reauthorization, or should be superseded by participation in the Yolo HCP/NCCP.

Mitigation Measure 4.3-1b

COA #59 shall be revised as follows to reference applicable requirements for addressing potential impacts on VELB:

The proposed Reclamation Plan, including relevant plan sheets, the reclamation narrative, and the HRP, as appropriate, shall be revised to include specific provisions to ensure compliance with the USFWS "Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle." "General Compensation Guidelines for the Valley Elderberry Longhorn Beetle." This shall include measures to: protect all elderberry shrubs to be retained; transplanting shrubs that cannot be avoided; planting replacement elderberry seedlings and associated riparian vegetation at appropriate ratios; and defining short and long-term maintenance, monitoring, and protection methods for the designated mitigation areas. A pre-construction survey for elderberry shrubs shall be performed by a qualified biologist prior to commencement of <u>each phase of mining</u>. The survey shall serve to confirm previous mapping of elderberry locations and determine whether any new shrubs have become established within the new mining area for which protection or replacement should be provided. The results of the survey shall be submitted to the CountyUSFWS as a report summarizing the purpose,

findings, and recommendations consistent with the provisions of the revised HRP. All elderberry shrubs to be retained shall be flagged and fencing provided where necessary to preclude possible damage or loss of shrubs.

Mitigation Measure 4.3-1c

COA #61.5 shall be revised as follows to avoid native bird nests in active use and ensure compliance with the Migratory Bird Treaty Act and CDFW Code:

A pre-construction raptor <u>and native bird nesting</u> survey shall be conducted by a qualified wildlife biologist prior to initiation of mining <u>in each phase</u> to determine the presence or absence of active raptor <u>and other native bird nests</u> which could be disturbed or lost within the new mining area. The results of the survey shall be submitted to the <u>CountyCDFG</u> as a report summarizing the purpose, findings, recommendations, and status of any nests encountered. Elements of the pre-construction nesting survey and construction restrictions shall include the following:

- Conduct the survey 30 days prior to any tree removal and grubbing, grading or other habitat modifications if proposed during the breeding season for tree nesting raptors and other native birds (from February March 1 through August 3145). Confirmation surveys for ground nesting bank swallow shall be conducted as well during this period when grading and other habitat modifications are proposed during the breeding season. Confirmation surveys on presence or absence of burrowing owl ground nesting colonies shall be required prior to initiation of a particular phase of mining at any time of year to ensure absence of any resident owls.
- If an active raptor or other native bird nest is encountered, establish an appropriate buffer around the nest location, as determined in consultation with representatives of <u>CDFWCDFG</u>. The perimeter of the buffer zone shall be <u>temporarily fenced or</u> flagged in the field at 50-foot intervals, and all construction activities, including grading, tree removal, equipment storage, and stockpiling of soils, shall be prohibited within this buffer zone.
- Prohibit construction activities within the designated buffer zone until the consulting wildlife biologist has determined that breeding was unsuccessful, that the young have fledged from the nest, or that a <u>CDFW</u>CDFG-approved relocation plan has been successfully implemented.
- Prohibit construction activities, including removal of any nest tree or burrow, within the designated buffer zone unless written confirmation from the wildlife biologist on the status of <u>completed</u> nesting activity has been submitted in writing to <u>the County and CDFW</u> CDFG.

Mitigation Measure 4.3-1d

The following measures will avoid inadvertent take of western red bat and other specialstatus bat species, if present in trees to be removed:

- A qualified biologist shall visually inspect trees to be removed for bat roosts within 7 days prior to their removal. The biologist shall look for signs of bats including sightings of live or dead bats, bat calls or squeaking, the smell of bats, bat droppings, grease stains or urine stains around openings in trees, or flies around such openings. Trees with multiple hollows, crevices, forked branches, woodpecker holes, or loose and flaking bark have the highest chance of occupation and shall be inspected carefully.
- If signs of bats are detected, confirmation of presence or absence shall be determined by the qualified biologist, which may include night emergence or acoustic surveys. Appropriate measures shall be recommended by the qualified biologist to prevent loss or injury to individual bats if determined to be present. This may include phased removal of any occupied tree over multiple days to allow individual bats to disperse to other roosting locations.
- If an active maternity roost is encountered during the maternity season (April 15 to August 31), CDFW shall be contacted for direction on how to proceed and an appropriate exclusion zone established around the occupied tree or structure until young bats are old enough to leave the roost without jeopardy. The size of the buffer would take into account the proximity and noise level of project activities, the distance and amount of vegetation or screening between the roost and construction activities; and species-specific needs, if known, such as sensitivity to disturbance.
- Due to restrictions of the California Health Department, direct contact by workers with any bat is not allowed. A qualified bat biologist shall be contacted immediately if a bat roost is discovered during project construction.

Significance After Mitigation:

With implementation of mitigation measures identified above, the impact is considered less-than-significant.

Impact 4.3-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. The impact would be *less than significant*.

As concluded in the 1996 EIR, mining and other activities could result in significant impacts on riparian habitat and mature oaks unless appropriate controls are taken to restrict access and limit disturbance as called for in Mitigation Measures 4.6-2a (Condition of Approval No. 51), 4.6-2b (Condition of Approval No. 52), 4.6-2c (Condition of Approval No. 53), 4.6-2d (Condition of Approval No. 54), and 4.6-2e (Condition of Approval No. 55). These measures have been completed and/or remain a requirement of the project as mining and reclamation progresses.

Conditions of Approval No. 17 and Condition of Approval No. 79 related to methylmercury require the following:

COA #17	The operator is prohibited from proceeding with any new wet excavation, unless ambient mercury levels in the creek have been determined pursuant
	to Section 10-5.517 of the Reclamation Ordinance, six months prior.

COA #79 Comply with Section 10-4.420.1 of the County Mining Ordinance and 10-5.517 of the County Reclamation Ordinance related to Mercury Bioaccumulation in Wildlife.

Monitoring and reporting related to these conditions are ongoing. Mercury is a state-wide problem, and the State and the County have been regulating and monitoring mercury for many years. The CCAP was designed to consider mercury, and actively manages and monitors it annually through the CCAP. The requirements of the mercury monitoring program were greatly expanded in detail as part of the comprehensive 2019 CCAP Update.

Essentially, if methylated mercury in lake fish exceeds ambient levels in the watershed the operators must address it with a Lake Management Plan. Options include water mixing, management of water chemistry, fish removal, and filling the lake. The County will not accept dedication without acceptable monitoring history and/or a successful lake management plan. Operators are required to establish a mechanism to pay for their individual Lake Management Plans in perpetuity. In addition, the County's Maintenance and Remediation Fee is available should unforeseen management issues occur in reclaimed lakes owned by the County. This topic is addressed in detail in Section 4.6, Hydrology and Water Quality.

Condition of Approval No. 80 requires native species for all habitat restoration and erosion control:

COA #80 Pursuant to Sections 10-4.433 (Soil Stockpiles), 10-5.508 (Erosion Control), 10-5.533 (Wetland Habitat), and 10-5.601(c)(1) of the Reclamation Ordinance, reclamation, restoration, vegetative erosion control, etc. occurring after December 31, 2020 shall utilize plant material and/ seed mixes collected in the vicinity of the project site in order to control the origin of the genetic stock and provide the most site-adapted ecotypes. Native seeds, plants, and cuttings used for such activities shall be ecotypes of Cache Creek Watershed genetic origin including areas outside of Yolo County and of Yolo County genetic origin when materials are used that originate from outside of the Cache Creek Watershed.

The proposed project includes revisions to the reclamation plan and HRP to include all native species.

Conclusion

There are no proposed changes in the project that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore no revisions to the analysis in the 1996 EIR are required related to this area of impact.

There are no changes in the circumstances under which the project would be undertaken that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore no revisions to the analysis in the 1996 EIR are required related to this area of impact.

There is no new important information relevant to this area of impact that was not previously known at the time of the 1996 EIR. There are no related new significant impacts, more substantial increase in the severity of previously identified significant impacts, previously dismissed mitigation that is now feasible, previously dismissed alternatives that are now feasible, or different more effective alternatives that have emerged or become known.

Mitigation Measure(s)

None required.

Impact 4.3-3: Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. The impact would be *less than significant*.

As discussed in the 1996 DEIR, mining activities on the Snyder East parcel would require relocation of approximately 1,000 linear feet of an existing drainage ditch which passes through the southeastern portion of the site and is likely a regulated waters. The proposed project amendment includes relocation of this feature along the east side of the Snyder East parcel, east of the eastern lake. This feature is regularly maintained for drainage purposes and the segment to be relocated was devoid of any vegetative cover so replacement as part of proposed realignment would adequately address potential impacts to this feature.

Mitigation Measure 4.6-6a (Condition of Approval No. 62) called for securing authorizations from the U.S. Army Corps and CDFW for any channel modifications, if required, prior to grading or other modifications. This measure remains applicable, and Condition of Approval No. 62 would continue to apply. No new impacts associated with the proposed project are anticipated and impacts would be less than significant.

Conclusion

There are no proposed changes in the project that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore no revisions to the analysis in the 1996 EIR are required related to this area of impact.

There are no changes in the circumstances under which the project would be undertaken that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore no revisions to the analysis in the 1996 EIR are required related to this area of impact.

There is no new important information relevant to this area of impact that was not previously known at the time of the 1996 EIR. There are no related new significant impacts, more substantial increase in the severity of previously identified significant impacts, previously dismissed mitigation

that is now feasible, previously dismissed alternatives that are now feasible, or different more effective alternatives that have emerged or become known.

Mitigation Measure(s) None required.

Impact 4.3-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The impact would be *significant*.

The proposed project would alter existing habitat and impact special-status species as discussed under Impact 4.3-1 and would degrade the quality of the reclaimed environment for wildlife as discussed in Impact 4.3-6. The proposed project could also result in interference with the movement of wildlife species, impacts to wildlife corridors, and adverse effects on wildlife nursery sites under future reclaimed conditions. However, with implementation of the reclamation plan and proposed habitat restoration as mitigated, these outcomes would be avoided, and the project would not substantially degrade the quality of the environment. Therefore, the potential for impacts would be mitigated to acceptable levels.

Conclusion

As presented above, there are proposed changes in the project reclamation that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts related to species movement and planned habitat corridors, and therefore revisions to the analysis in the 1996 EIR are required related to this area of impact.

There are no changes in the circumstances under which the project would be undertaken that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore no revisions to the analysis in the 1996 EIR are required related to this area of impact.

There is no new important information relevant to this area of impact that was not previously known at the time of the 1996 EIR. There are no related new significant impacts, more substantial increase in the severity of previously identified significant impacts, previously dismissed mitigation that is now feasible, previously dismissed alternatives that are now feasible, or different more effective alternatives that have emerged or become known.

Mitigation Measure 4.3-4

Implement Mitigation Measures 4.3-1(a through d), and Mitigation Measures 4.3-6 (a through c).

Significance After Mitigation:

With implementation of mitigation measures identified above, the impact is considered less-than-significant.

Impact 4.3-5: Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. The impact would be *less than significant.*

The proposed project is a covered activity within the plan area of the Yolo HCP/NCCP. As discussed under Impact 4.3-1, the applicant secured a 2081 authorization with CDFW in 1997 to address potential impacts of mining on Swainson's hawk and bank swallow. The authorization remains in effect until 2027, unless modified to extend beyond that termination date. Mitigation measures from the 1996 EIR serve to address potential impacts on VELB and nesting raptors, and revisions to these measures recommended above under Impact 4.3-1 serve to address potential impacts on active bird nests protected under the MBTA and State Fish and Game Code as well as potential roosting by bat species of concern.

Mitigation Measure 4.3-1a requires CEMEX to provide additional information verifying that the 2081 authorization was properly conveyed to CEMEX from the executing parties, determining whether amendment of the authorization is required to reflect the proposed project, and confirming whether the authorization will terminate 30 years from execution which would be September 24, 2027, or may be continued in some manner in order to continue to rely upon it for purposes of the proposed project. Should new "take" authorization be required, coverage under the Yolo HCP/NCCP, including implementation of relevant avoidance and minimization measures, may be appropriate/required. No conflicts with the Yolo HCP/NCCP are anticipated and there would, therefore, the potential for impact would be less than significant.

Conclusion

There are no proposed changes in the project that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore no revisions to the analysis in the 1996 EIR are required related to this area of impact.

There are no changes in the circumstances under which the project would be undertaken that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore no revisions to the analysis in the 1996 EIR are required related to this area of impact.

There is no new important information relevant to this area of impact that was not previously known at the time of the 1996 EIR. There are no related new significant impacts, more substantial increase in the severity of previously identified significant impacts, previously dismissed mitigation that is now feasible, previously dismissed alternatives that are now feasible, or different more effective alternatives that have emerged or become known.

Mitigation Measure(s)

None Required.

Impact 4.3-6: The project has the potential to substantially 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; or substantially reduce the number or restrict the range of an endangered, rare or threatened species. The impact would be *significant*.

As discussed in the 1996 EIR, wildlife habitat affected by mining activities would be largely limited to agricultural fields since disturbance would generally be restricted to areas outside the sensitive riparian habitat along the Cache Creek corridor. Species adapted to areas of agricultural cover already experience routine disturbance and population fluctuations due to agricultural practices. Small mammal and reptile populations collectively provide an important foraging base for Swainson's hawk and other raptors. Habitat and movement corridors provided by restored hedgerows, restored habitat along the creek, and the perimeter habitat around the future reclaimed lakes would help maintain prey populations and the prey base of raptors and other predators, and serve to achieve the wildlife habitat restoration goals of the proposed HRP. The degree to which the proposed project and proposed HRP would adequately address the quality of the reclaimed environment for wildlife and would substantially affect the planned reclaimed habitat for wildlife species is discussed below.

Hedgerows. General Plan Policy CO-2.17 calls for emphasizing and encouraging the use of wildlife-friendly farming practices, including establishing native shrub hedgerows and/or tree rows along field borders. Action 6.4-8 in the OCMP calls for including native-planted hedgerows and other vegetated buffers between restored habitat areas and adjoining farmland to minimize the potential for riparian areas to serve as harbors for predators and insect pests, buffer agricultural operations and providing valuable pollinator resources that in turn could enhance agricultural production. Section 10-4.440 of the Mining Ordinance and Section 10-5.523 of the Reclamation Ordinance require establishment of native-planted hedgerows and/or other vegetated buffers between restored habitat areas and adjoining farmland.

The approved project is subject to the following conditions related to hedgerows:

<u>Condition of Approval No. 26 of the 1996 Approval</u>: Pursuant to Action 6.4-8 of the OCMP, Section 10-4.440 of the Mining Ordinance, and Section 10-5.523 of the Reclamation Ordinance, hedgerows and other vegetated buffers required between restored habitat areas and adjoining farmland, shall use entirely native species. These hedgerows/buffers are intended to minimize the potential for riparian areas to serve as harbors for predators and insect pests. These buffers are intended to also reduce noise, dust, and spraying generated by agricultural operations.

<u>Condition of Approval No. 51 of the 1996 Approval</u>: Figure 8 of the HRP shall be revised to indicate the location of hedgerow plantings, around the Hutson parcel in Phase 1 or as specified as part of habitat enhancement in a Section 2081 permit if required by the CDFG, or to mitigate as a 1:1 ratio the actual loss of fence row habitat (Mitigation Measure 4.6-2a).

<u>Condition of Approval No. 4 of the 2022 Minor Modification</u>: Implement hedgerow planting to provide required vegetative cover within a continuous uninterrupted band along the north boundary of the west half of Phase 1 and the entire west boundary between Phase 1 and Phase 2. The width of the new hedgerow planting shall match the width of the existing hedgerow plantings on the north. If the PG&E powerline easement prohibits the planting of species identified for the rest of the hedgerow, alternative native species may be proposed for

the powerline easement right-of-way area. The design shall be approved by the County with input from the Cache Creek Area Plan Technical Advisory Committee's Riparian Biologist. The applicant shall submit design plans (including proposed native species and irrigation) for County review and approval no later than September 30, 2022. All approved improvements shall be implemented within 90 days of County approval.

<u>Condition of Approval No. 5 of the 2022 Minor Modification</u>: Throughout the life of the mining and reclamation approvals, the applicant shall annually monitor and actively maintain the hedgerows.

The approved 1995/1997 HRP, consisting of the 1995 HRP document plus the 1997 Addendum, includes on page 46 language describing required hedgerow restoration on the edges of the reclaimed agricultural lands (excerpted below):

3. Hedgerow Restoration

Hedgerows are traditional and important components of any diverse agricultural system. In this project, hedgerow areas will be provided on the edges of the reclaimed agricultural lands. Figures 15 and 16 show a typical planting plan for one hedgerow; this pattern would be duplicated throughout the reclaimed agricultural area.

The 3:1 slopes will be planted with a diverse mix of oak woodland and native grassland species. Valley oaks will be dominant in this area at a density of approximately 30 per acre. These hedgerows will also eventually provide roosting habitat for the Swainson's Hawk (SH). While the project site is probably used for foraging by the SH, it is not near nest sites and the proximity of other alfalfa fields to these nest sites makes high intensity use by SH of the project site unlikely except on rare occasions.



Typical cross-sections and plans are provided in Figures 15 and 16 of the 1995/1997 HRP:

The revised figure provided with the 1997 Addendum (1997 HRP Addendum, Figure 3, Habitat Management Lands, Zentner and Zentner, March 28, 1997) depicts hedgerows along the north and west sides of the approximate west half of Phase 1:



As described earlier, based on the 2022 Minor Modification application, approximately 3.0 acres of restored hedgerows were assumed to exist on the site just north of the west side of Phase 1. Approximately 2.7 acres were planted in that location in 1997 through 2002 as mitigation for loss of hedgerow plantings as mining occurred in Phase 1 of the Farnham West parcel. Over time, the natural recruitment of vegetation has increased the vegetative cover to 3.0 acres (see Figure 4.3-3, 2081 MOU Habitat Areas). CEMEX has not actively maintained this area, nor monitored it in annual compliance reports prior to 2022.

In October of 2023 Cemex informed the County, based on information provided by their biologists Zentner Planning & Ecology, that the ±3.0-acre area of hedgerows was mistakenly characterized and should instead be considered "riparian" restoration. The proposed HRP correctly refers to the existing hedgerow area as a "riparian depression".

In examining applicant compliance with prior approvals, the Minor Modification analysis relied on the applicant's previous characterization of this area as hedgerows. However, because no acreage credit was given for the 3.0 acres as part of the Minor Modification consideration, the County has determined the error does not materially change the Minor Modification approval or conditions. Implementation of Minor Modification Condition of Approval #4 identified above will

result in the creation of a larger area of hedgerows, including restoration of the subject 3.0 acres within the larger hedgerow area, thus rectifying the error.

As a component of implementing Minor Modification Condition #4, the applicant has subsequently provided plans showing proposed hedgerow restoration and irrigation along the north and west side of Phase 1 (see Figure 4.3-4, Sample Area of Proposed Hedgerow Restoration and Figure 4.3-5, Sample Area of Proposed Hedgerow Irrigation). The proposed Hedgerow Restoration plan identifies native grass seed mix rates that differ from those identified in Table 4, Native Grassland Buffer Plant List, on page 19 of the proposed HRP (Appendix E). In the proposed native grass seed mix for the hedgerow plantings, three species are identified rather than the ten specified in the proposed HRP, as well as a lower application rate of 37 rather than 48.5 lbs/acre. Also, milkweed and mugwort rose pot plantings are not included as part of the native grass treatment for the proposed hedgerow plantings but are included in the Native Grassland Buffer zones in the proposed HRP. Minor Modification Condition #4 is modified and carried forward in Mitigation Measure 4.3-6a. Other required modifications to the applicant's proposed hedgerow plans, to address items identified above, are also identified in Mitigation Measure 4.3-6a

Hedgerows provide important habitat for wildlife, and are a required element of habitat restoration under the CCAP. The proposed hedgerow restoration and irrigation plans provide important design specifications and should be fully integrated into the proposed HRP. The proposed HRP includes establishment of native grassland cover in transition areas between restored habitat and reclaimed agriculture, but does not include the expanded hedgerow habitat required by Condition of Approval No. 4 of the 2022 Minor Modification. There is an opportunity through implementation of the proposed HRP to satisfy outstanding requirements of the project by incorporating hedgerow plantings and ensuring successful establishment, as well as mitigate for impacts arising from the proposed revisions to the project by establishing hedgerows along the edges of reclaimed agricultural lands as described in the approved 1995/1997 HRP. Hedgerows improve overall habitat values, provide important wildlife movement corridors, and help reduce noise, dust, and spraying generated by agricultural operations. They provide environmental benefits that offset detrimental impacts from the project to wildlife arising from 20 additional years of wildlife disturbance of a larger area, and a delay of reclamation to suitable habitat of up to 36 years. Expanding the hedgerows would also be consistent with the requirements of the CCAP (see County Code Section 10-4.440) which states in part: "Native-planted hedgerows and/or other vegetated buffers shall be included between restored habitat areas and adjoining farmland..."; and Section 10-5.523 which states in part: "Native-planted hedgerows and other vegetated buffers shall be included between restored habitat areas and adjoining farmland....". Mitigation measures identified below are required to provide for hedgerow plantings along reclaimed agricultural areas on the site as part of the proposed HRP.

The proposed revised reclamation and HRP would result in a 2:1 band of native grassland between reclaimed and existing agriculture (see page 9 of the proposed HRP, Appendix E) rather than 3:1 slopes planted with hedgerows comprised of a diverse mix of oak woodlands and native grasslands (see page 46 of the approved 1995/1997 HRP). This proposed change would result in less valuable reclaimed native habitat in these transition areas. The steeper band of more limited native grasslands habitat would reduce the habitat value which would increase impacts to biological resources, as compared to more gradual slope and more diverse native vegetation in the approved

HRP. Additional mitigation measures identified below would increase the habitat value of the proposed reclamation plantings in the reclaimed agricultural field transition areas which would reduce this impact and compensate for impacted habitat values, thus offsetting the impact.

The proposed project would increase the size of the reclaimed lake features by 33 percent from 153 acres as approved to 204 acres as proposed, and at the same time reduce the habitat contiguity of the future lakes (and lake habitat) to Cache Creek by 63 percent from 3,740 linear feet as approved to 1,400 linear feet as proposed. Additional mitigation measures identified below would require enhancement of a proposed band of native grasslands around the lakes to include hedgerow plantings which would help minimize this impact.

The proposed revised reclamation and HRP would not be consistent with Reclamation Ordinance Sections 10-5.509¹¹ and 10-5.523 that require reestablishment of field margin habitat. Additional mitigation measures identified below would ensure compliance in those field margin areas, thus avoiding the impact.

Mining activities inconsistent with approvals have impacted previously existing and previously restored/reclaimed hedgerows; delayed restoration/reclamation to hedgerows has exacerbated biological impacts; and underperforming design and failed maintenance of restored/reclaimed hedgerows have exacerbated biological impacts. Longer periods of mining, delayed reclamation, and larger areas of disturbance proposed as a part of the project would result in new and increased biological impacts. As a result, unmitigated impacts to biological resources remain and/or have increased, and will extend over a longer period of time. Additional mitigation measures identified below would help compensate for, and thus partially offset this impact.

Habitat Enhancement along Cache Creek. Overall, the proposed HRP would provide for substantial habitat enhancement along the Cache Creek corridor. This includes establishment of oak savanna and riparian woodland along a 300- to 500-foot-wide band adjoining the top of bank. The one exception to this is along the top of bank extending about 3,000 feet downstream of the I-505 bridge through the existing plant site. In this area, the proposed HRP identifies a narrow band of oak savanna and native grassland, with a width at or under 100 feet along much of the top of bank. Figure 4.3-6, Plant Site North Boundary, identifies in orange those areas where proposed habitat enhancement would extend less than 200 feet from the top of the creekbank. The plant site is identified to be reclaimed to primarily agriculture. There is an opportunity to provide future enhancement along the south bank of Cache Creek where woody riparian vegetation is largely absent.

The lack of woody riparian vegetation in this location is likely due, at least in part, to historic operations associated with the plant site which maximized use of the area all the way up to the top of bank. Much of the existing bank to Cache Creek has been hardened with installation of rock riprap to address erosion and protect the gravel storage areas, rock conveyors, utilities, and

¹¹ Requirements for fence row habitat included as part of the original drafting of the CCAP. Page 4.6-37 of the Solano 1996 EIR relating to benefits and mitigation derived from fence row habitat references Mitigation Measure 4.6-3a of the 1996 OCMP EIR (Draft volume) page 4.6-28 mandating action policy 6.4-13 of the OCMP. This language became Reclamation Ordinance Section 10-5.509 discussed above. Mining Ordinance Section 10-4.440 was modified during the CCAP Update (2019) to include parallel language.

other improvements. This erosion and the operator's response to protect mining assets represent changed circumstances under which the project is undertaken that affect project impacts on wildlife and reduce the ecological value of potential mitigation measures by reducing the viable space for wildlife to traverse along the creek. Combined with the narrow band of oak woodland habitat proposed under the proposed HRP, the lack of riparian cover would severely limit the future habitat values for this reach of Cache Creek. Providing a wider restored area of at least 200 feet, enhanced with oak savanna and native grassland plantings would resolve historic infringement on the creek corridor in this area and provide a more consistent band of riparian habitat along the north edge of the site. It would also provide a larger buffer area to accommodate future bank movement typically associated with riparian systems without posing a risk to agricultural improvements, such as irrigation lines and farm maintenance roads. The enhanced creek corridor would provide environmental benefits that offset detrimental impacts of the project on wildlife arising from 20 additional years of wildlife disturbance of a larger area, and a delay of reclamation to suitable habitat of up to 36 years.

This modification to the reclamation plan to add what equates to about 6.2 acres of oak savanna and native grassland plantings would not adversely affect future agricultural reclamation of the plant site, or trigger mitigation under 10-5.525 or 8-2.404, because the type of habitat enhancement that would be implemented within the 200-foot buffer is consistent with General Plan policy and Reclamation Ordinance Sections 10-5.509 and 10-5.523 related to establishment of field margins as a component of agricultural operations. Moreover, the 200-foot band provides greater species diversity and density than a more narrow and less diverse fence row would provide.

Under current approvals, operations at the plant site would end in 2027 (4 years from now), resulting in reclamation to agriculture and open space uses that provide greater habitat values. The proposed extension would extend the plant operations at this location for an additional 20 years to 2047, with reclamation activities extending an additional 5 years through 2052. Longer periods of mining, delayed reclamation, and larger areas of disturbance will result in new and increased biological impacts. By increasing habitat enhancement north of the plant site to be more consistent with planned habitat enhancement along other project creek frontage, additional mitigation measures identified below would improve the biological resource values, create a consistent habitat corridor with a minimum width of 200 feet south of the top of the bank, and both reduce and compensate for new and increased impacts.

The applicant has requested to increase the plant processing area by more than 440 percent by combining the eastern 31.9 acres of Phase 2 and 100 acres of Phase 3 with the existing 30-acre plant site for a total of plant/processing area of 162 acres. By increasing habitat enhancement north of the plant site to be more consistent with planned habitat enhancement along other project creek frontage, additional mitigation measures identified below would improve biological resource values, create a consistent habitat corridor with a minimum width of 200 feet south of the top of the bank, and both reduce and compensate for new and increased impacts.

The 200 foot width provides biological resource values that the proposed narrower band of habitat enhancement would not provide, and, in addition, it is consistent in width with the minimum allowed creek setback area for mining that is identified in Section 10-4.429 of the Mining Code.

The existing lack of riparian cover in this area, combined with the narrow band of oak woodland habitat proposed under the proposed HRP, would severely limit the future habitat values for this reach of Cache Creek. This is inconsistent with other planned and proposed restoration/reclamation in the project area. Providing a wider restored area of at least 200 feet, enhanced with oak savanna and native grassland plantings, would provide a more consistent band of riparian habitat along the north edge of the site and provide a larger buffer area to accommodate future bank movement typically associated with riparian systems without posing a risk to planned agricultural use and associated improvements, such as irrigation lines and farm maintenance roads. The benefits from these improvements would help offset the new and increased biological impacts resulting from the changes in the project.

Reclaimed Lakes and Wetland Enhancement. Section 10-5.533 of the Reclamation Ordinance requires off-channel excavations that are to be reclaimed to permanent lakes to include riparian and/or wetland perimeter habitat with features such as: scalloped basin perimeters with extended peninsulas, islands, and stepped benches of various widths at approximately three (3) foot vertical intervals both above and below the groundwater level. The purposes of these treatments are to ensure conditions that allow for establishment of wetland and riparian habitat and to provide complexity to the lake design to increase their value as wildlife habitat.

The approved Reclamation Plan and HRP identified four lakes with associated perimeter habitat (see Figure 4.3-7, Habitat Restoration Plan Peninsulas Comparison). The two small lakes would have stayed in private ownership and the two larger lakes would be dedicated to the County. Condition of Approval No. 56 required at least one permanent island on one of the lakes. Floating artificial islands and submerged peninsulas described in the approved 1995/1997 HRP were required on all four lakes. Approximately 46 submerged peninsulas totaling approximately 4.6 acres were depicted along the shoreline of the four lakes. These peninsulas would provide transitional aquatic habitat and shoreline complexity.

The use of floating artificial islands was an emerging innovation at the time that was proposed in recognition of the substantial volume of sand and gravel that would be required to create additional permanent islands. Under the approved HRP the artificial islands were to be wooden structures approximately 20 by 20 feet in size and covered with gravel and sand to reduce vegetation growth (see pages 45 and 46 of the approved 1995/1997 HRP). The floating islands were to be positioned around the perimeter of each lake, generally near the end of the submerged peninsulas. Although the artificial islands may provide resting and roosting substrate for shorebirds and waterfowl, it is likely the lack of any vegetative cover and exposed condition would severely limit their habitat value. They would be tethered in place by cables and could become stranded on shore as water levels recede during the summer months. The wooden structures would likely eventually disintegrate and/or anchoring cables would break, resulting in ongoing maintenance concerns.



Figure 4.3-3 2081 MOU Habitat Areas



Figure 4.3-4 Sample Area of Proposed Hedgerow Restoration



Figure 4.3-5 Sample Area of Proposed Hedgerow Irrigation

Figure 4.3-6 Plant Site North Boundary





Figure 4.3-7 Habitat Restoration Plan Peninsulas Comparison

The proposed design of the artificial islands could be modernized to use more hardy materials (e.g., recycled plastics) with soils and plants integrated into the design. However, use of floating islands is a relatively minor design/aesthetic element (with some water quality and habitat value) that can be considered in the future once the lakes/ponds are established and following an assessment of the need. To the extent they provide habitat value, there are other options available that would be more complimentary to other restoration efforts and provide greater value. The focus of the restoration efforts should be to restore natural systems. More fully developed perimeter vegetation would be a preferable shoreline treatment. Managing the shoreline of the lakes/ponds by planting riparian-associated trees and other vegetation would better serve the function of restoring wildlife habitat, and to a much greater extent.

The proposed Reclamation Plan and HRP eliminates the two private lakes and proposes two larger lakes that would be dedicated to the County. The scalloped peninsula shoreline treatment has been modified to include undulating shoreline grading with three large peninsulas on the westerly lake and a single peninsula on the easterly lake. The applicant has indicated it would be challenging to implement the submerged peninsulas because it is difficult to backfill to a specific slope inclination under water. Accordingly, the proposed Reclamation Plan was updated to propose four larger peninsulas for a total of 4.6 acres. This includes three peninsulas in the future Phase 5 lake and one peninsula in the future Phase 6 lake. The four peninsulas are sited to generally coincide with future dredge anchor points, from which the dredge will pivot to access the resources in the mining footprint for each phase. One permanent island is shown for each lake, although details regarding the smaller island on the east lake are not provided. The peninsulas and islands will be planted with perennial marsh, riparian woodland, and oak savannah habitat.

A comparison of design features for the reclaimed lakes, under approved and proposed conditions, is provided in Table 4.3-2 below:

Lake Feature	Approved Reclamation/HRP	Proposed Reclamation/HRP
Number of lakes	4	2
	(2 smaller private; 2 larger public)	(2 larger public)
Open Water Acreage	88 ac. west lake	103 ac. west lake
	49 ac. east lake	<u>101 ac. east lake</u>
	<u>16 ac. two small lakes</u>	204 ac. total
	153 ac. total	
Perimeter Habitat	27.6 ac. west lake	27.5 ac. west lake
	23.2 ac. east lake	33.2 ac. east lake
	40.4 ac. two smaller lakes	60.7 ac. total
	91.2 ac. total	
Peninsulas	+46 totaling 4.6 ac.	4 totaling 4.6 ac.
Permanent Islands	1 totaling 0.3 ac.	2 totaling 1.6 ac.
Artificial Islands	Yes	No
Creek Connectivity	3,740 linear feet	1,400 linear feet

Table 4.3-2: Reclaimed Lake Design Comparison

As previously noted, the continuity or connectivity between the reclaimed lake perimeter habitat and the creek would be decreased by 63 percent as a result of the proposed changes to the

reclamation plan. As approved the distance in which the reclaimed lake perimeter habitat would be immediately adjacent to the creek is approximately 3,740 feet. As proposed that distance would be reduced to 1,400 feet of immediate proximity. A decrease of 2,340 feet. The proposed project would also reduce the total number of reclaimed lakes from four to two, increase the area of open water, decrease the acreage of shoreline habitat, and decrease the shoreline complexity. These changes would decrease the overall wildlife habitat values of the lakes and their associated habitat. The ratio of perimeter habitat to open water would diminish by approximately one half, from about 1:1.7 as approved (153 ac. of open water \div 91.2 ac. perimeter habitat = 1.7 ac.) to 1:3.4 as proposed (204 ac open water \div 60.7 ac. perimeter habitat = 3.4 ac.). This reduction in habitat values associated with the proposed changed reclaimed lake design would be significant without further enhancement of the lakes under the proposed project.

The proposed HRP would result in a decrease in the enhanced habitat value associated with the proposed lakes on the site, which would be in conflict with the intent of CCAP, and in particular with Section 10-5.533. Mitigation Measure 4.3-6(a-c) would ensure the achievement of intended wildlife habitat values associated with reclamation.

Conclusion

As presented above, there are proposed changes in the project that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore revisions to the analysis in the 1996 EIR are required related to this area of impact. These changes include: 1) changes in reclamation design that would result in less valuable reclaimed habitat; 2) reduced contiguity between future reclaimed lakes and creek habitat; 3) inconsistency with County code related to field margin habitat; 4) mining activities inconsistent with approvals; 5) delayed restoration and reclamation to hedgerows; 6) underperforming design and failed maintenance of hedgerows; 7) longer periods of mining; 8) delayed reclamation; 9) larger areas of disturbance; and 10) increases in the plant processing area

There are changes in the circumstances under which the project would be undertaken that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts due to creek erosion and mining activities, and therefore revisions to the analysis in the 1996 EIR are required related to this area of impact.

There is no new important information relevant to this area of impact that was not previously known at the time of the 1996 EIR. There are no related new significant impacts, more substantial increase in the severity of previously identified significant impacts, previously dismissed mitigation that is now feasible, previously dismissed alternatives that are now feasible, or different more effective alternatives that have emerged or become known.

Implementation of Mitigation Measures identified below would reduce this impact to a less-thansignificant level. Mitigation Measure 4.3-6a would incorporate hedgerow requirements into the HRP, and require hedgerow plantings at 300 foot intervals in native grasslands transition areas along agricultural transition areas and in native grasslands band around the future lakes in addition to the hedgerow requirements in the 2022 Minor Modification conditions of approval. Mitigation Measure 4.3-6b would require a minimum 200 feet of oak savanna and native grassland south of top of bank and north of plant site. Mitigation Measure 4.3-6c identifies various clarifications and modifications to the proposed HRP and Reclamation Plans.

Mitigation Measure 4.3-6a

The proposed Habitat Restoration Plan shall be modified as follows:

- The proposed HRP shall be modified and resubmitted for staff confirmation of compliance to incorporate a new section integrating hedgerow as a restoration planting type and including descriptive text, locations for required and expanded planting, crosssections, and elevations substantively equal to or better than the equivalent information contained in the approved 1995/1997 HRP. The HRP shall define performance standards and completion benchmarks, and identify monitoring and reporting requirements. Proposed Exhibit A, Hedgerow Restoration Plan (see Figure 4.3-4), and proposed Exhibit B, Hedgerow Irrigation Plan (see Figure 4.3-5), shall also be integrated.
- 2. Proposed Exhibit A, Hedgerow Restoration Plan, shall be modified to adjust the location and interval of woody plantings, and reference the seed mix and application rates in Table 4 of the proposed HRP. Where hedgerow treatments are required to be integrated into native grassland zones, tree and shrub plantings shall occur at minimum intervals of about 300 feet.
- 3. 2022 Minor Modification Condition #4 shall be clarified as follows to reflect corrected information:

Implement hedgerow planting to provide required vegetative cover within a continuous uninterrupted band along the north boundary of the west half of Phase 1 and the entire west boundary between Phase 1 and Phase 2. The width of the new hedgerow planting shall match the width of the existing hedgerow riparian depression plantings on the north. If the PG&E powerline easement prohibits the planting of species identified for the rest of the hedgerow, alternative native species may be proposed for the powerline easement right-of-way area. The design shall be approved by the County with input from the Cache Creek Area Plan Technical Advisory Committee's Riparian Biologist, and shall reflect the modifications described in Measure 4.3-6a(1) and (2) above. The applicant shall submit design plans (including proposed native species and irrigation) for County review and approval no later than September 30, 2022. All approved improvements shall be implemented within 90 days of County approval.

- 4. All plans, permit documents, and exhibits shall be modified to be consistent with the final approved HRP as modified by mitigation measures and./or conditions of approval.
- 5. The proposed HRP shall be modified to include hedgerow plantings integrated: (i) in the native grassland reclamation proposed for the sloped transition between unmined agricultural fields and reclaimed agricultural fields in phases 1 through 4 (shown in pink on Figure 4.3-8, Mitigation Measure 4.3-6 Expanded Hedgerows and Native Habitat Enhancement); and (ii) on the west, south, and east sides of the combined

future reclaimed lake area within the proposed native grasslands buffer areas (shown in red on Figure 4.3-8).

- 6. The minimum width of the proposed new hedgerow plantings in the agricultural transition area described in item 5(i) shall be the entire width of the transition slope. The minimum width of the hedgerow plantings around the lake area described in item 5(ii) shall be the entire width of the proposed native grassland buffer area as shown in the final approved HRP.
- 7. Proposed native habitat enhancement adjoining the creek north of Phases 1, 3, and 4 (shown in purple on Figure 4.3-8) are acceptable, as revised by other mitigation measures and/or conditions of approval.
- 8. Throughout the life of the mining and reclamation approvals, the applicant shall annually monitor and actively maintain all hedgerows.

Mitigation Measure 4.3-6b

The proposed HRP shall be revised to expand the Oak Savanna and Native Grassland treatment to a minimum of 200 feet south of the top of bank to Cache Creek along the entire existing Plant Site and west to I-505 (Kaupke parcel) (shown in green on Figure 4.3-8).

Mitigation Measure 4.3-6c

The following modifications to the proposed HRP and Reclamation Plans are required:

- 1. The proposed HRP shall be modified to:
 - a. Modify the size for both islands to 0.8 acres each measured above the high water elevation. Provide design details for both islands subject to review and approval by the County.
 - b. Both islands shall be clearly identified in mining plans, reclamation plans, and revegetation plans in the proposed HRP as permanent features.
 - c. Peninsulas and other modifications to shoreline treatments shall be shown on the reclamation plans.
 - d. The east lake shoreline shall have a minimum of three smaller peninsulas with a total acreage equal to or exceeding the acreage as proposed, designed to improve habitat complexity (see Figure 4.3-9, Lake Shorelines with Peninsulas).
 - e. Reclamation plans sheets and the final figures in the HRP shall be consistent. Reclamation Plan sheets shall be made consistent with HRP Figure 3, Typical Cross-Section detail.
- 2. COA #56 shall be replaced with the following:

Characteristics of the two permanent islands and shoreline treatments shall include the following:

- a. The elevation of the island shall extend a minimum of five feet above the average high groundwater level (approximately 125-foot elevation) to prevent complete inundation during the winter months. Slopes of the island shall not exceed 3:1 above the average low groundwater level.
- b. The channel of water separating the island from the mainland shall have a minimum distance of 20 feet and a depth reaching at least 5 feet during the average summer low groundwater level to prevent predators from wading to the island during the summer months. A temporary land-bridge to permit vehicle access and maintenance of restoration plantings on the island may be included in the design, or alternative method defined to ensure maintenance and monitoring. If land-bridge access is used, it shall be removed following completion of the minimum five-year monitoring program for the restoration effort.
- c. The islands shall be revegetated with perennial marsh at the lowest elevations and low terrace riparian species up to the average high groundwater level, with a cover of native grassland and scattered shrubs and trees provided over the top of the island. The HRP shall ensure successful establishment of vegetative cover on the islands, which shall include installation of temporary irrigation consistent with other tree and shrub plantings.

Significance After Mitigation:

With implementation of mitigation measures identified above, the impact is considered less-than-significant.

Impact 4.3-7: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The impact would be *significant*.

The proposed project would not substantially conflict with local policies and ordinances related to biological resources, including the 2030 Countywide General Plan and CCAP. An assessment of the hedgerows, habitat enhancement along Cache Creek, and the proposed lake reclamation is provided primarily under Impact 4.3-6. Table 4.3-3 below provides an analysis of consistency of the proposed project with applicable policies and regulations that have been adopted for the purpose of avoiding or mitigating environmental effects related to biological resources.

The proposed HRP includes details on resoiling, restoration plantings, performance standards, monitoring and reporting, test plots, weed control, and maintenance. In general, the proposed species selection, density of plantings, rate of seed application, revegetation standards, and monitoring methods meet acceptable standards and would serve to enhance existing habitat values of the site, particularly along the Cache Creek corridor.



Figure 4.3-8 Mitigation Measure 4.3-6 Expanded Hedgerows and Native Habitat Enhancement



Figure 4.3-9 Lake Shorelines with Peninsulas

There are several components of the proposed HRP that require modification in order to ensure adequacy for successful monitoring and establishment. These include:

- 1. Increasing the diversity of plantings in the shrub layer of the Oak Savanna Plant List (Table 3) which currently specifies only four species.
- 2. Providing additional controls for Noxious Grassland Species under the Weed Control Plan to address common invasive species with a moderate California Invasive Plant Council rating of Moderate, with corrective action taken to reduce their dominance and encourage native perennial species in areas of Native Grassland and Oak Savanna Understory.
- 3. Including of an invasive cover component in the Performance Criteria for Riparian Woodland and Oak Savannah and reduce all Final Performance Criteria for invasive cover to less than 5 percent.
- 4. Providing expanded Performance Standards under the Weed Control Plan to clearly define corrective actions any time target species exceed the 5 percent cover threshold.

Allowing invasive species to become established up to a 10 percent threshold before treatment is triggered allows for unnecessary dominance and adversely affects the restoration effort. A lack of defining triggers for weed abatement historically has contributed to past problems with noxious species on the site. These concerns regarding the proposed HRP represent a significant impact given the importance of successful habitat enhancement and weed control.

The proposed HRP also identifies the need for infill of cottonwood and walnut trees and removal of invasives, to enhance existing screening along I-505 (see pages 9 and 20 of the proposed HRP). This screening is required pursuant to Sections 10-4.404, 10-4.429(c), and 10-4.502(b)(1) of the County Mining Ordinance and would be achieved under the proposed HRP.

Conclusion

As presented above, there are proposed changes in reclamation for the project that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts related to conflicts with policies and ordinances protecting biological resources, and therefore revisions to the analysis in the 1996 EIR are required related to this area of impact.

There are no changes in the circumstances under which the project would be undertaken that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore no revisions to the analysis in the 1996 EIR are required related to this area of impact.

There is no new important information relevant to this area of impact that was not previously known at the time of the 1996 EIR. There are no related new significant impacts, more substantial increase in the severity of previously identified significant impacts, previously dismissed mitigation that is now feasible, previously dismissed alternatives that are now feasible, or different more effective alternatives that have emerged or become known.

Implementation of Mitigation Measures identified below would reduce this impact to a less-thansignificant level.

Mitigation Measure 4.3-7

The following revisions to the proposed HRP shall be implemented to expand species diversity, allow for verification of annual monitoring, and ensure control of noxious weed species as part of on-going and future maintenance:

- 1. Increase the diversity of plantings in the shrub layer of the Oak Savanna to include wood rose (Rosa californica) (Table 3).
- 2. Define additional controls for Noxious Grassland Species under the Weed Control Plan to address common invasive species with a moderate California Invasive Plant Council (IPC) rating of Moderate, with corrective action taken to reduce their dominance and encourage native perennial species in areas of Native Grassland and Oak Savanna Understory any time estimated cover of target invasive species exceeds 5 percent.
- 3. Include an Invasive Cover component of less than 5 percent in the Performance Criteria for Riparian Woodland and Oak Savannah (Table 7) where corrective action is to be taken as part of annual maintenance any time this threshold is exceeded.
- 4. Expand the Performance Standards under the Weed Control Plan to clearly define corrective actions any time target species exceed the 5 percent cover threshold. This shall at minimum include options of mechanical or cultural (i.e., grazing) treatment on an annual basis as necessary to reduce abundance, particularly for more common invasive grass species which tend to dominate native grassland restoration areas.
- 5. Revise the proposed HRP to require update as necessary of the list of target invasive species to be monitored based on input from the TAC Riparian Biologist, to ensure that new invasive species that may colonize the site are adequately addressed as part of future monitoring and treatments.
- 6. Provide in annual reports, the GPS coordinates for test plot locations established as part of the annual monitoring effort, to allow for field inspection by the County.
- 7. Modify the notation at the bottom of the Native Grassland Buffer Plant List (Table 4) to clarify that overall species diversity shall be maintained even where substitutions may be necessary based on availability and demonstrated suitability.

Significance After Mitigation:

With implementation of mitigation measures identified above, the impact is considered less-than-significant.

Impact 4.3-8: Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The impact would be *less than significant*.

Table 4.3-3 provides an analysis of consistency of the proposed project with applicable policies and regulations that have been adopted for the purpose of avoiding or mitigating environmental effects related to biological resources.

Conclusion

There are no proposed changes in the project that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore no revisions to the analysis in the 1996 EIR are required related to this area of impact.

There are no changes in the circumstances under which the project would be undertaken that would result in new significant impacts or substantial increase in the severity of previously identified significant impacts, and therefore no revisions to the analysis in the 1996 EIR are required related to this area of impact.

There is no new important information relevant to this area of impact that was not previously known at the time of the 1996 EIR. There are no related new significant impacts, more substantial increase in the severity of previously identified significant impacts, previously dismissed mitigation that is now feasible, previously dismissed alternatives that are now feasible, or different more effective alternatives that have emerged or become known.

Mitigation Measure(s)

None required.

Table 4.3-3: Consistency with Applicable Plans, Policies, and Regulations

Policy/Regulation	Consistency Discussion	
Yolo County General Plan		
Goal CO-2 Biological Resources. Protect and enhance biological resources through the conservation, maintenance, and restoration of key habitat areas and corresponding connections that represent the diverse geography, topography, biological communities, and ecological integrity of the landscape.	Prior conditions of approval, mitigation measures, and new mitigation measures identified in this analysis, ensure compliance with this policy while balancing other related policies and programs. Therefore, the proposed project, as modified by these requirements, would be consistent with this policy.	
Policy CO-2.1 Consider and maintain the ecological function of landscapes, connecting features, watersheds, and wildlife movement corridors.	The CCAP balances competing policy concerns and the project is conditioned consistent with the CCAP. Annual inspections and the County's enforcement authority ensure compliance.	
Policy CO-2.3 Preserve and enhance those biological communities that contribute to the county's rich biodiversity including blue oak and mixed oak woodlands, native grassland prairies, wetlands, riparian areas, aquatic habitat, agricultural lands, heritage valley oak trees, remnant valley oak groves, and roadside tree rows.	Prior conditions of approval, mitigation measures, and new mitigation measures identified in this analysis, ensure compliance with this policy while balancing other related policies and programs. Therefore, the proposed project, as modified by these requirements, would be consistent with this policy.	

Policy CO-2.4	Consistency with the Yolo HCP/NCCP is
Coordinate with other regional efforts (e.g., Yolo	addressed in Impact 4.3-5. The proposed
county HCP/NCCP) to sustain or recover special-	project, as modified by required conditions and
status species populations by preserving and	mitigation measures, would be consistent with
Palian CO 2.0	this policy.
Policy CO-2.9 Distant riportan corridors to maintain and balance	See discussion under impacts 4.3-2 and 4.3-6.
wildlife volues	As miligated, the proposed project would not
	adversely affect the existing fipalian vegetation
	include expansion of the extent of riparian
	habitat New mitigation measures identified in this
	analysis ensures compliance with this policy
	Thus, the proposed project would be consistent
	with this policy.
Policy CO-2.10	Prior conditions of approval, mitigation
Encourage the restoration of native habitat.	measures, and new mitigation measures
5	identified in this analysis, ensure compliance with
	this policy while balancing other related policies
	and programs. Therefore, the proposed project
	would be consistent with this policy.
Policy CO-2.14	The proposed project would not significantly affect
Ensure no net loss of oak woodlands, alkali	any of these habitat types. Prior conditions of
sinks, rare soils, vernal pools or geological	approval, mitigation measures, and new mitigation
substrates that support rare endemic species.	measures identified in this analysis, ensure
The limited loss of blue oak woodland and	compliance with this policy while balancing other
fragmontation of large forests exceeding 10	related policies and programs. Therefore, the
acres is avoided and losses are mitigated to the	policy
extent feasible	policy.
Policy CO-2.17	Impact 4.3-6 addresses potential impacts related
Emphasize and encourage the use of wildlife-	to hedgerows. Prior conditions of approval.
friendly farming practices within the County's	mitigation measures, and new mitigation
Agricultural Districts and with private landowners,	measures identified in this analysis, ensure
including:	compliance with this policy while balancing other
 Establishing native shrub hedgerows 	related policies and programs. Therefore, the
and/or tree rows along field borders.	proposed project would be consistent with this
 Protecting remnant valley oak trees. 	policy.
 Planting tree rows along roadsides, field 	
borders, and rural driveways.	
 Creating and/or maintaining berms. 	
 Winter flooding of fields. 	
 Restoring field margins (filter 	
strips), ponds, and woodlands in non-	
farmed areas.	
 Using native species and grassland 	
restoration in marginal areas.	
 Managing and maintaining irrigation and drainage gapale to provide behitst 	
urainage canais to provide nabitat,	
support native species, and serve as wildlife movement corriders	
 Managing winter stubble to provide 	
 managing winter studdle to provide foraging babitat 	
 Discouraging the conversion of open 	
ditches to underground nines which	
could adversely affect diant darter	
snakes and other wildlife that rely on	

open waters.Widening watercourses, including the use of setback levees.	
Policy CO-2.30 Promote native perennial grass habitat restoration and controlled fire management in grazing lands to reduce invasive species cover and enhance rangeland forage.	Native grasslands would be installed as part of habitat restoration at the margins of reclaimed agricultural fields and in areas of oak savannah habitat. As mitigated, the proposed HRP includes performance standards and monitoring to ensure successful establishment and no conflicts with this policy would occur.
Policy CO-2.34 Recognize, protect and enhance the habitat value and role of wildlife migration corridors for the Sacramento River, Putah Creek, Willow Slough, the Blue Ridge, the Capay Hills, the Dunnigan Hills and Cache Creek.	See Impacts 4.3-4 and 4.3-6. As mitigated, the proposed mining and reclamation activities would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. All proposed off-channel excavations would be located 200 feet or more from Cache Creek. Thus, the proposed project would be consistent with this policy.
Policy CO-2.36 Habitat preserved as a part of any mitigation requirements shall be preserved in perpetuity through deed restrictions, conservation easement restrictions, or other method to ensure that the habitat remains protected. All habitat mitigation must have a secure, ongoing funding source for operation and maintenance.	The CCAP is in alignment with this policy and is self-funded through per-ton fees on aggregate mining. This project would be consistent with the CCAP.
Policy CO-2.38 Avoid adverse impacts to wildlife movement corridors and nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds). Preserve the functional value of movement corridors to ensure that essential habitat areas do not become isolated from one another due to the placement of either temporary or permanent barriers within the corridors. Encourage avoidance of nursery sites (e.g., nest sites, dens, spawning areas, breeding ponds) during periods when the sites are actively used and that nursery sites which are used repeatedly over time are preserved to the greatest feasible extent or fully mitigated if they cannot be avoided.	See Impacts 4.3-4 and 4.3-6. As mitigated, the proposed mining and reclamation activities would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. All proposed off-channel excavations would be located 200 feet or more from Cache Creek. Thus, the proposed project would be consistent with this policy.
Policy CO-2.41 Require that impacts to species listed under the State or federal Endangered Species Acts, or species identified as special-status by the resource agencies, be avoided to the greatest feasible extent. If avoidance is not possible, fully mitigate impacts consistent with applicable local, State, and Federal requirements.	See Impacts 4.3-1 and 4.3-6. Mitigation measures are identified to reduce potential impacts to special-status species. The proposed project would comply with these measures and this policy.
Policy CO-2.42 Projects that would impact Swainson's hawk foraging habitat shall participate in the Agreement Regarding Mitigation for Impacts to Swainson's Hawk Foraging Habitat in Yolo	See Impact 4.3-1. Prior conditions of approval, mitigation measures, and new mitigation measures identified in this analysis, ensure compliance with this policy while balancing other related policies and programs. Therefore, the

County entered into by the CDFG and the Yolo County HIP/NCCP Joint Powers Agency, or satisfy other subsequent adopted mitigation requirements consistent with applicable local, State, and federal requirements.	proposed project would be consistent with this policy.
Policy CO-3.1	The CCAP is in alignment with this policy and is
Encourage the production and conservation of	self-funded through per-ton fees on aggregate
mineral resources, balanced by the consideration	mining. This project would be consistent with the
of important social values, including recreation,	CCAP.
water, wildlife, agriculture, aesthetics, flood	
Policy CO-5.8	Prior conditions of approval mitigation
Support efforts to reduce the accumulation of	measures, and new mitigation measures
methyl mercury in fish tissue in Cache Creek and	identified in this analysis, ensure compliance
the Delta, as well as the consumption of fish with	with this policy while balancing other related
high levels of methyl mercury.	policies and programs. Therefore, the proposed
or ol	project would be consistent with this policy.
Ott-Channel	Mining Plan
Goal 6.2-1 Provide for a diverse, native ecosystem within the	The project, as mitigated, includes reclamation to habitat and open space uses consistent with this
OCMP area that is self-sustaining and capable of	aoal.
supporting native wildlife and invertebrate	9°
species.	
Action 6.4-2	The project, as mitigated, includes reclamation to
Provide for the development of shallow areas	naditat consistent with this action.
extend below the groundwater level to create	
wetland and riparian habitat. (See Section 10-	
5.529 of the Reclamation Ordinance.)	
Action 6.4-3	See Impacts 4.3-1, 4.3-5, and 4.3-6. Prior
Mitigate for short-term and long-term loss of	conditions of approval, mitigation measures, and
agricultural land and habitat pursuant to	new mitigation measures identified in this analysis,
Comply with the Yolo HCP/NCCP for species	ensure compliance with this policy while balancing
covered by that Plan. For non-covered species	proposed project would be consistent with this
for which impacts may occur, ensure compliance	policy.
with appropriate measures in site-specific	
biological assessments required under the	
OCMP and CCRMP, in compliance with the State	
FISH and Wildlife Code, Migratory Bird Treaty Act,	
programs, as appropriate.	
Action 6.4-5	The project includes reclamation to habitat
Include provisions to enhance habitat for special	consistent with this action.
status species in restoration components of	
reclamation plans, where feasible. (See Section	
10-5.523 of the Reclamation Ordinance.)	The project includes replamation to habitat
Action 6.4-7 Restore ringrian babitat throughout the planning	consistent with this action Action 6.4-7 of the
area wherever appropriate However re-	OCMP, and Actions 4.4-10 and 4.4-11 of the
vegetative efforts should be primarily focused on	CCRMP require alignment with the Yolo County
implementing recommendations described in the	CCAP Parkway Plan. The net gains proposed by
Technical Studies and the subsequent	the applicant are in general alignment with the
Restoration Recommendations incorporated into	Parkway Plan. New proposed dedication of land
the CCRMP. Integrate off-channel and in-	ensuring connection to the Millsap Property satisfy

channel revegetation plans with the goal of reducing fragmentation by expanding and connecting existing habitat patches, optimizing restoration planning in alignment with the Parkway Plan, and supporting future funding proposals. Ensure that elements such as soils, drainage, slopes, and habitat types complement one another in a coordinated effort.	identified opportunities and constraints. The Parkway Plan also identifies lake recreation, informal parking, trails, and pathways with which the applicant's net gains proposal is consistent.
Action 6.4-8 Include native-planted hedgerows and other vegetated buffers between restored habitat areas and adjoining farmland, in order to minimize the potential for riparian areas to serve as harbors for predators and insect pests. These buffers will also reduce the noise, dust, and spraying generated by agricultural operations, in addition to providing valuable pollinator resources that in turn could enhance agricultural production.	Impact 4.3-6 addresses potential impacts related to hedgerows. Mitigation measures are identified to ensure compliance with these and other actions and policies that call for establishment of hedgerows as part of habitat restoration. Therefore, the proposed project would be consistent with this policy.
Cache Creek Resource	ces Management Plan
Goal 4.2-1 Provide for a diverse, native riparian ecosystem within the CCRMP area that is self-sustaining and capable of supporting native wildlife.	As mitigated, the project includes reclamation to habitat consistent with this goal.
Objective 4.3-2 Establish conditions to encourage the development of a variety of natural riparian habitat types within the CCRMP area in order to support biological resources associated with Cache Creek.	As mitigated, the project includes reclamation to habitat consistent with this objective.
Action 4.4-5 Establish a series of wildlife reserves (see Figure 9) to provide core areas for maximizing wildlife and fish habitat, to help protect areas of high-quality habitat from future degradation, and to provide source areas and wildlife nurseries from which native plants and wildlife can colonize other reaches of the creek. Wildlife reserves should emphasize the preservation of high-quality existing habitat, areas with high species diversity, areas supporting unique species or biotic communities, and habitat for rare, threatened, and endangered species.	The project, as mitigated, includes reclamation to habitat consistent with this action.
Action 4.4-6 Favor projects that establish native woody vegetation over emergent wetlands in appropriate areas within the planning area. Riparian forest and scrub habitats have largely disappeared regionally and are much more difficult to reestablish than are emergent wetland habitats. Emergent wetlands can also be established in a greater range of environmental conditions, whereas riparian woodlands require specific considerations in order to thrive.	See Impacts 4.3-6 and 4.3-7. As mitigated, the project includes reclamation to habitat consistent with this action.
Action 4.4-10 Through development agreements with mining operations, require integration of in-channel revegetation plans in order to reduce fragmentation	Modifications to the existing Development Agreement would occur with approval of the proposed project. The applicant has proposed modified and additional net gains that are

by expanding and connecting existing habitat patches, optimize restoration planning, and support future funding proposals. Ensure that elements such as soils, drainage, slopes, and habitat types complement one another in a coordinated effort. Coordinate in-channel habitat areas with proposed wildlife mitigation and "net gain" established as a part of the off-channel mining operations in order to create a larger riparian habitat area. Require consistency with the Parkway Plan.	described in Chapter 3.0, Project Description. The net gains proposed by the applicant are in general alignment with the Parkway Plan. New proposed dedication of land ensuring connection to the Millsap Property satisfy identified opportunities and constraints. The Parkway Plan also identifies lake recreation, informal parking, trails, and pathways with which the applicant's net gains proposal is consistent.
Action 4.4-11 Work with the aggregate industry to achieve multiple benefits, whereby habitat developed as a part of a reclamation plan may be dedicated for preservation to offset development projects elsewhere. Coordinate this effort with implementation of the Parkway Plan and the Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP).	The proposed project does not interfere with achievement of this action. As mitigated, the project includes reclamation to habitat consistent with this action. Action 6.4-7 of the OCMP, and Actions 4.4-10 and 4.4-11 of the CCRMP require alignment with the Yolo County CCAP Parkway Plan. The net gains proposed by the applicant are in general alignment with the Parkway Plan. New proposed dedication of land ensuring connection to the Millsap Property satisfy identified opportunities and constraints. The Parkway Plan also identifies lake recreation, informal parking, trails, and pathways with which the applicant's net gains proposal is consistent.
Action 4.4-12 Recommended planting procedures and materials, soil amendments and stabilizers, and appropriate species and planting densities for marshland, oak woodland, and riparian woodland restoration efforts should be performance based. Variations from these guidelines shall be acceptable if alternative restoration plans have been prepared by a qualified biologist and reviewed by the TAC, consistent with the policies of the CCRMP	Impacts 4.3-6 and 4.3-7 analyzes the adequacy of the proposed HRP and identifies mitigation measures to improve performance. Input from the TAC riparian biologist has been received as input into this assessment.
Action 4.4-13 Avoid disturbance to important wildlife habitat features such as nest trees, colonial breeding locations, elderberry shrubs, and essential cover associated with riparian forest and oak woodland habitat. This should include sensitive siting of maintenance access and recreational facilities away from these features in accordance with the Migratory Bird Treaty Act and other applicable regulations.	Prior conditions of approval, mitigation measures, and new mitigation measures identified in this analysis, ensure compliance with this policy while balancing other related policies and programs. Therefore, the proposed project would be consistent with this policy.
Off-Channel Surfac	e Mining Ordinance
Section 10-4.418 All surface mining operations shall be consistent with applicable components of the Yolo Habitat Conservation Plan/ Natural Community Conservation Plan (HCP/NCCP).	Consistency with the Yolo HCP/NCCP is addressed in Impact 4.3-5. The proposed project would be consistent with this policy.
Section 10-4.429(f). Setbacks (f) Off-channel excavations shall be set back a minimum of twenty-five (25) feet from ribarian	The proposed off-channel excavations would be setback well over the minimum 25 feet from the nearest riparian vegetation. Thus, the proposed

vegetation.	project would comply with this regulation.
Section 10-4.436 Existing vegetation and habitat to be retained shall be enclosed by temporary fencing to restrict access, protect against damage and/or provide buffers to reduce the impact of dust. Temporary fencing shall be a minimum of four (4) feet high. The disturbance of riparian forest or oak woodland vegetation, including identified off- channel vegetation, should be avoided if possible.	Controls would be implemented to protect sensitive habitat from construction activities. The project would comply with all applicable requirements related to fencing of vegetation to be retained and providing replacement where avoidance is infeasible. Therefore, the proposed project would comply with this regulation.
Replacement habitat and plantings shall be established where complete avoidance is not possible, according to a habitat restoration plan prepared by a qualified biologist, consistent with the goals of this plan.	
Section 10-4.440 Avoid disturbance to important wildlife habitat features such as bird nesting trees, colonial breeding locations, elderberry host plants for Valley Elderberry Longhorn Beetle, and mature riparian forest and oak woodland habitat. This shall include sensitive siting of haul roads, trails, and recreational facilities away from these features. Suitable habitat for special-status species shall be protected and enhanced, or replaced as a part of mitigation plans prepared by a qualified biologist where necessary, and through compliance with the Yolo HCP/NCCP for special-status species covered by that Plan. Mining and reclamation activities shall be performed in accordance with the State Fish and Wildlife Code, Migratory Bird Treaty Act, and other applicable regulations to protect bird nests when in active use.	Refer to Impact 4.3-1 for a discussion of potential impacts to special-status species, including VELB. Mitigation measures are included to reduce potential impacts to special-status species. Impact 4.3-6 addresses potential impacts related to hedgerows. Prior conditions of approval, mitigation measures, and new mitigation measures identified in this analysis, ensure compliance with applicable requirements. Therefore, the proposed project would comply with this regulation
Native-planted hedgerows and/or other vegetated buffers shall be included between restored habitat areas and adjoining farmland, in order to minimize the potential for riparian areas to serve as harbors for predators and insect pests. These buffers will also reduce the noise, dust, and spraying generated by agricultural operations, in addition to providing valuable pollinator resources that in turn could enhance agricultural production.	
Section 10-4.502(b)(1) A biological inventory and analysis to evaluate the on-site habitat value of the proposed mined area, as well as the potential impacts to special- status species and sensitive natural communities, both on-site and within the immediate area. The analysis shall propose appropriate measures to reduce any potential adverse impacts to special-status species or significant suitable habitat, and shall ensure	An updated biological resources survey, compliant with these requirements, was provided for this project and reviewed as part of this Draft SEIR. The proposed HRP generally addresses species suitability for restoration plantings, weed control, and irrigation. The impact analysis under Impact 4.3-6 and 4.3-7 analyzes the adequacy of the proposed HRP and identifies mitigation measures to improve performance. A wetland delineation was prepared for the site and impacts on regulated

compliance with the Yolo HCP/NCCP, California Fish and Game Code, Migratory Bird Treaty Act, and other applicable regulations, plans and programs. The analysis shall also include a wetland delineation study for any potential on- site wetlands, and shall provide adequate mitigation and appropriate authorizations from regulatory agencies, where required. If	waters is reviewed under Impact 4.3-3. The proposed HRP acknowledges the need for enhanced screening along I-505. The proposed project would comply with these regulations.
landscaping is proposed to screen the surface mining operations from adjoining public rights-of- way or public and private lands, the biological analysis shall include an evaluation of the feasibility of the species, weed control, and irrigation methods to be used.	
Reclamation	n Ordinance
Section 10-5.509 Fence Row Habitat Where fence row or field margin habitat previously existed, reestablish similar habitat as part of reclamation to agricultural use to replace and improve the wildlife habitat value of agricultural lands, allowing for the reestablishment of scattered native trees, shrubs, and ground covers along the margins of reclaimed fields. Reestablished habitat can be located in areas other than where it occurred originally. Restoration plans shall specify ultimate fence row or field margin locations, identify planting densities for trees and shrubs, and include provisions for monitoring and maintenance to ensure establishment. Restoration plans should be	Impact 4.3-6 addresses potential impacts related to hedgerows. Mitigation measures are identified to ensure compliance with these and other actions and policies that call for establishment of hedgerows as part of habitat restoration. The proposed project would comply with these regulations.
Section 10-5.514 All reclamation plans shall be consistent with applicable components of the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP)	Consistency with the Yolo HCP/NCCP is addressed in Impact 4.3-5. As mitigated, the proposed project would be consistent with this regulation.
Section 10-5.515 Proposed habitat restoration or mitigation plans for lands within the OCMP area shall be sent to the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and other interested parties for review and comment through the CEQA process as applicable, to ensure that the projects do not conflict with other existing habitat enhancement efforts.	The proposed Reclamation Plan and HRP are summarized in Chapter 3, Project Description. This Draft SEIR will be circulated to these and other interested parties for review and comment. Thus, the project would be consistent with this regulation.
Section 10-5.523 Site-specific planting plans shall be developed by a qualified biologist for proposed habitat reclamation projects. Restoration components of reclamation plans shall include provisions to enhance habitat for special-status species, where feasible. Native-planted hedgerows and other vegetated	The proposed HRP includes details on restoration plantings. Impact 4.3-6 addresses potential impacts related to hedgerows. Mitigation measures are included to ensure compliance with these and other actions and policies that call for establishment of hedgerows as part of habitat restoration. proposed project would comply with these regulations.
buffers shall be included between restored	

habitat areas and adjoining farmland, in order to minimize the potential for riparian areas to serve as harbors for predators and insect pests. These buffers will also reduce the noise, dust, and spraying generated by agricultural operations, in addition to providing valuable pollinator resources that in turn could enhance agricultural production.	
Section 10-5.533 Off-channel excavations that are proposed to be reclaimed to permanent lakes shall include riparian and/or wetland habitat. The creation of riparian and or wetland habitat along the perimeter of permanent lakes shall include appropriate features such as: scalloped basin perimeters with extended peninsulas, islands, and stepped benches of various widths at approximately three (3) foot vertical intervals both above and below the groundwater level. Where wetlands are not proposed, either grassland and/or woodland habitat, or agricultural fields separated from the lake by a berm, shall be established using only native species in order to provide continuous habitat value around the permanent lakes.	Enhancement to proposed shoreline habitat is addressed in Impact 4.3-6. Mitigation measures are identified related to enhancement of the permanent lakes to ensure compliance with this regulation.

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