

Table of Contents

1.1	Introduction	1-1
1.1.1	Overview	1-1
1.1.2	Background.....	1-2
1.1.3	Purpose	1-3
1.2	Overview of the Planning Process	1-4
1.2.1	Steering Committee	1-4
1.2.2	Users Advisory Group.....	1-5
1.2.3	Public Outreach and Involvement.....	1-6
1.3	Scope of Conservation Strategy.....	1-7
1.3.1	Study Area	1-7
1.3.2	Regulatory Scope.....	1-8
1.3.3	Focal Species	1-8
1.4	Regulatory Setting	1-11
1.4.1	Federal and State Endangered Species Laws	1-11
1.4.2	Other Federal and State Species Laws	1-17
1.4.3	National Environmental Policy Act.....	1-19
1.4.4	California Environmental Quality Act.....	1-20
1.4.5	Federal and State Wetland Laws and Regulations	1-20
1.5	Document Organization.....	1-22

1.1 Introduction

1.1.1 Overview

The East Alameda County Conservation Strategy (hereafter, Conservation Strategy) is intended to provide an effective framework to protect, enhance, and restore natural resources in eastern Alameda County, while improving and streamlining the environmental permitting process for impacts resulting from infrastructure and development projects. The Conservation Strategy will focus on impacts on biological resources such as endangered and other special-status

species as well as sensitive habitat types (e.g., wetlands, riparian corridors, rare upland communities). The federal, state, and local entities listed below have prepared this Conservation Strategy in partnership:

- Alameda County (County);
- Alameda County Congestion Management Agency (ACCMA);
- Alameda County Waste Management Authority;
- Alameda County Resource Conservation District (ACRCD);
- California Department of Fish and Game (CDFG);
- City of Dublin;
- City of Livermore;
- City of Pleasanton;
- East Bay Regional Parks District (EBRPD);
- Natural Resource Conservation Service (NRCS);
- San Francisco Bay Regional Water Quality Control Board (SFRWQCB);
- Zone 7 Water Agency (Zone 7); and
- U.S. Fish and Wildlife Service (USFWS).

The Conservation Strategy will enable local projects to comply with state and federal regulatory requirements within a framework of comprehensive conservation goals and objectives, and be implemented using consistent and standardized mitigation requirements. Section 1.3.1 provides a detailed description of the Conservation Strategy study area.

1.1.2 Background

Local agencies in eastern Alameda County have until now primarily conducted threatened and endangered species permitting for urban growth, infrastructure development, and operations and maintenance activities with the Resource Agencies (USFWS, CDFG, SFRWQCB) on a project-by-project basis. This has often resulted in project delays, inconsistencies during the review process, and piecemeal mitigation for special-status species and natural communities.

The City of Livermore and Zone 7 held early discussions with USFWS and CDFG to determine the best course of action for the region. USFWS and CDFG identified a need for a comprehensive regional conservation strategy. Initial discussions ruled out a habitat conservation plan (HCP) as a tool to provide this strategy because of the growth controls in place in the county and the three cities. Because of these growth controls, local agencies expect relatively low levels of future residential and commercial development on natural lands that

would typically fund a large part of HCP implementation. Instead, a regional conservation strategy that would not result in incidental take permits for threatened or endangered species, as is the case in an HCP, was recommended as the best tool to reach the common goals. Other local land use and resource agencies joined the process in order to address impacts from infrastructure and development projects in a comprehensive manner. Since it was anticipated that the majority of mitigation that resulted from the Conservation Strategy would occur on private lands, the NRCS and ACRCDC joined the planning process as well. This was enabled in part through a CALFED Bay-Delta Program grant that the ACRCDC received in 2007 to support the planning process and components of Conservation Strategy implementation. A Steering Committee was then formed to guide the planning process.

1.1.3 Purpose

The primary purpose of this Conservation Strategy is to provide a baseline inventory of biological resources and conservation priorities that will be utilized by local agencies and resource agencies during project-level planning and environmental permitting. To this end, the Conservation Strategy describes how to avoid, minimize, and mitigate impacts on selected focal special-status species and sensitive habitats. By implementing the Conservation Strategy, local agencies can more easily address the legal requirements relevant to these species. Projects and activities that will benefit from this Conservation Strategy include urban and suburban growth and a variety of road, water, and other needed infrastructure construction and maintenance activities. Because this Conservation Strategy will not result in permits, but rather serve as guidance for project-level permits, individual projects may need to implement different or more avoidance, minimization, and mitigation measures than what is outlined here. To avoid this from happening, the Resource Agencies have participated in the development of this Conservation Strategy with the intent that it becomes the blueprint for all mitigation and conservation in the study area.

This Conservation Strategy is designed to serve as a coordinated approach to conservation in the eastern portion of Alameda County. This Conservation Strategy not only addresses project-level mitigation for potential impacts to species and habitats throughout the eastern part of the county, but also provides a broader, coordinated approach for local conservation efforts beyond those required by mitigation. In turn the strategy will capitalize on existing stewardship practices that are a long tradition in the county and encourage new means for those practices to persist. This includes identification of important conservation priorities in the county that are supported by local stakeholders and resource agencies and the importance on not just protection of those resources, but management as well.

This Conservation Strategy will achieve the specific goals listed below.

- Set priorities for mitigation and conservation to contribute to the protection of special-status species and sensitive habitats in eastern Alameda County.
- Improve corridors and linkages between other conservation planning efforts (HCPs/NCCPs) inside and adjacent to the EACCS Study Area.
- Set goals to document, protect, and enhance native biological and ecological diversity in the study area.
- Establish a set of standards to preserve, enhance, restore, manage, and monitor native species and the habitats and ecosystems upon which they depend.
- Streamline and simplify the issuance of permits for future project proponents in the study area by indicating clear standards for lawful incidental take¹ of species listed as threatened or endangered pursuant to the federal Endangered Species Act (ESA) and California Endangered Species Act (CESA) and by setting clear mitigation ratios for focal species and sensitive habitats.
- Standardize avoidance, minimization, mitigation, and compensation requirements of the ESA, CESA, California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and other applicable laws and regulations relating to biological and natural resources within the study area, so that public and private actions will be governed equally and consistently, thus reducing delays, expenses, and regulatory duplication.
- Provide a less costly, more efficient project review process that will result in more productive conservation than the current project-by-project, species-by-species compliance process for special-status species and sensitive habitat.
- Restore natural communities that have been degraded or lost over time where possible.
- Introduce creative solutions to making land management activities which benefit focal species more feasible through incentives for and the education of the private lands community.

1.2 Overview of the Planning Process

1.2.1 Steering Committee

The Steering Committee comprises the Resource Agencies and a representative from each local agency (funding partner) that is likely to have a need to mitigate

¹ *Take* as defined by the ESA means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” *Incidental take* is take that is incidental to, and not intended as part of, an otherwise lawful activity.

public projects within the study area in the foreseeable future or support implementation of the Conservation Strategy through on the ground conservation. A list of local agencies and Resource Agencies that were represented on the Steering Committee is shown in the opening paragraph of this document. During the planning process, the Steering Committee made decisions regarding the budget, management, and administration of the consultant contract. The Steering Committee directed the Conservation Strategy project and made decisions regarding public outreach, including convening the Users Advisory Group (UAG) (see Section 1.2.2, below). Decision-making by the Steering Committee was by consensus. The Steering Committee met once a month with additional meetings as needed at their discretion.

1.2.2 Users Advisory Group

The UAG was convened to review and provide real-time feedback to the Steering Committee and consultants on work products. The UAG was comprised of technical and nontechnical representatives from those entities that intend to *use* the strategy, such as local public agencies, USFWS, CDFG, Corps, SFRWQCB, developers, landowners, and environmental and conservation groups. The Steering Committee solicited participation in the UAG through mailings to individuals and groups that live or operate in eastern Alameda County. One information meeting was held to discuss the scope of the Conservation Strategy and the purpose of the UAG. Those interested in joining the UAG then completed an application. Those applications were reviewed by the Steering Committee and all that applied were asked to join the UAG. The Steering Committee conducted additional outreach to groups that were underrepresented on the UAG to create a group that was balanced and representative of interests in eastern Alameda County.

UAG members served as the point of contact for the group they were representing. The duties of the UAG included, but were not limited to, the following: reviewing, discussing, and providing comments on work products from the consultant; providing suggestions and advice of work products to the Steering Committee; and serving as a conduit between the Conservation Strategy planning process and their respective constituencies. The UAG met approximately every 6 weeks during the planning process.

The UAG consists of 27 individuals (plus several alternates) representing various interests. Groups represented on the UAG include:

- Alameda Creek Alliance;
- Alameda Local Agency Formation Commission;
- Audubon Society – Ohlone Chapter;
- California Coastal Conservancy;

- California Native Plant Society-East Bay Chapter (EBCNPS);
- Fletcher Conservation Properties;
- Friends of Livermore;
- Friends of Springtown Preserve;
- Friends of the Vineyards;
- Greenbelt Alliance;
- Hacienda Business Park;
- Home Builders Association of Northern California;
- Individual Rural Landowners;
- Lawrence Livermore Laboratories;
- Livermore Area Recreation and Park District (LARPD);
- Robert Harris & Associates;
- Save Mount Diablo;
- San Francisco Public Utilities Commission (SFPUC);
- Sierra Club;
- The Nature Conservancy; and
- Tri-Valley Conservancy.

1.2.3 Public Outreach and Involvement

To address general public inquiries about the Conservation Strategy, the Steering Committee convened a public outreach subcommittee to coordinate outreach efforts and direct the work of the consultant. The most direct form of public outreach that occurred during the planning process was through the UAG. The Steering Committee hosted three public meetings at key points during the planning process to better inform the public about the process and to identify opportunities for the public to become involved. In addition, two outreach events were sponsored by the ACRCDC to provide a forum for rural landowners to ask questions about and provide feedback on the planning process.

Public outreach and review was facilitated through a variety of channels, including:

- Conservation Strategy factsheet;
- list of frequently asked questions;
- landowner workshops hosted by ACRCDC;

- Conservation Strategy website with project updates, materials posted for review, and Steering Committee contacts;
- noticed updates to boards and councils delivered by Steering Committee representatives from each local agency; and
- public meetings at key project milestones occurred in:
 - May 2009 to review data and conservation goals,
 - September 2009 to review conservation priorities and draft strategy, and
 - September 2010 to review Public Release Draft of strategy, including Standardized Mitigation Ratios and Focal Species Habitat Evaluation Tools.

1.3 Scope of Conservation Strategy

This section introduces key elements of the Conservation Strategy: geographic scope (study area), regulatory scope, and focal species.

1.3.1 Study Area

The study area lies within Alameda County (Figure 1-1). Alameda County has a land area of 525,540 acres; the study area encompasses 271,485 acres, or approximately 52% of the county. The study area completely includes the cities of Dublin, Livermore, and Pleasanton. The boundary of the study area was based on political, ecological, and hydrologic factors (Figure 1-1). The western boundary of the study area runs along the Alameda Creek watershed boundary. This watershed boundary encompasses small portions of the cities of Fremont, Union City, and Hayward, though those jurisdictions were not formally part of the planning process. The northern, southern, and eastern boundaries of the study area follow the Alameda County line with Contra Costa County, Santa Clara County, and San Joaquin County, respectively. The study area includes a portion of the Central Valley and Sacramento-San Joaquin River Delta (Delta) watersheds in the northeastern corner of the study area. Outside of the urban areas the study area is largely a mix of grassland and woodland, with some intermittent scrub. Most of the study area is subject to some level of grazing as ranching is the bellwether if this part of the county.

The study area includes two other areas where large scale conservation plans are being developed during the Conservation Strategy planning process. The SFPUC is preparing a habitat conservation plan (Alameda Watershed HCP) for its watershed lands in the Alameda Creek watershed. The Alameda Watershed HCP study area includes nearly 48,000 acres in southern Alameda and northern Santa Clara Counties. The portion of that study area in Alameda County is

entirely within the Conservation Strategy study area. In addition, the Altamont Pass Wind Resource Area Conservation Plan (an HCP and a natural community conservation plan [NCCP]) is under development in eastern Alameda County and southeastern Contra Costa County. The portion of that planning area that is in Alameda County is entirely within the Conservation Strategy study area.

1.3.2 Regulatory Scope

The Conservation Strategy does not directly result in permits for any participating local agency. Instead, the Conservation Strategy is a tool to inform decisions during standard environmental permitting processes for projects that occur in the study area (Figure 1-2). However, the USFWS anticipates the development of a programmatic biological opinion for their listed species. In the future the Conservation Strategy could be used for the basis of a HCP, should the need arise. The regional inventory of biological resources presented in the Conservation Strategy allows projects to be reviewed by local agencies and resource agencies with a standardized regional context and with consistency across multiple projects. The standardized avoidance, minimization, and mitigation measures for species and natural communities will give local agencies, project proponents, and regulators more certainty of regulatory expectations and costs. This approach is expected to streamline permitting, reducing the overall cost of the permitting process and allowing the focus to be on conservation within the study area rather than a prolonged negotiation process. Furthermore, the Conservation Strategy will allow mitigation to be consolidated, facilitating better conservation and improved management reducing overall costs. In addition, the conservation priorities outlined in the Conservation Strategy will allow conservation groups to focus their efforts in the study area and encourage collaboration on conservation initiatives.

1.3.3 Focal Species

The Conservation Strategy creates a framework to protect native biological diversity, habitat for native species, natural communities, and local ecosystems in eastern Alameda County. The Conservation Strategy will conserve a wide range of natural resources, including native species that are common and rare, while focusing conservation efforts on species that are the focus of standard regulatory processes.

The Conservation Strategy addresses 19 listed and nonlisted species, called *focal species* (Table 1-1). These focal species comprise 13 wildlife species and 6 plant species. The Conservation Strategy provides a framework for long-term conservation and management of these species and the habitats that support them. The 19 focal species were identified using an initial assessment of the

occurrence, threat, and conservation opportunities of 132 special-status species (see “Species Evaluation,” below).

The Conservation Strategy includes measures to protect all 19 focal species as if they are currently listed as endangered or threatened under ESA and/or CESA (see “Definition of Special-Status Species,” below). Therefore, if any nonlisted focal species becomes listed in the future, it is anticipated that additional conservation within the study area should not be required.

1.3.3.1 Species Evaluation

To determine which species would be focal species under the Conservation Strategy, a comprehensive list of 132 special-status species that occur or may occur in the study area was compiled (Appendices A and B). This list was developed by reviewing the following sources:

- California Natural Diversity Database (CNDDDB) (2009);
- CNPS (2008) *Inventory of Rare and Endangered Vascular Plants of California*;
- CDFG lists of special animals and special plants (California Department of Fish and Game 2009a and 2009b);
- an animal species list obtained from the USFWS website for Alameda County (U.S. Fish and Wildlife Service 2008); and
- personal communication with local experts, including wildlife agency staff and representatives of local environmental groups including CNPS, Ohlone Chapter of the Audubon Society, EBRPD, and Alameda Creek Alliance.

1.3.3.2 Definition of Special-Status Species

Special-status species are defined as plants and animals that are legally protected under ESA, CESA, or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing.

Special-status plants are species with one or more of the following characteristics:

- listed or proposed for listing as threatened or endangered under ESA (50 Code of Federal Regulations [CFR] 17.12 [listed plants] and various notices in the Federal Register [FR] [proposed species]);
- candidate for possible future listing as threatened or endangered under the ESA (73 FR 7515–75244, December 10, 2008);
- listed or candidate for listing by the State of California as threatened or endangered under CESA (14 California Code of Regulations [CCR] 670.5);

- listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.);
- determined to meet the definitions of rare or endangered under CEQA (State CEQA Guidelines, Section 15380);
- considered by CNPS to be “rare, threatened or endangered in California” (Lists 1B and 2 in California Native Plant Society 2010) or vascular plants, bryophytes, and lichens listed as having special status by CDFG (California Department of Fish and Game 2009b); and/or
- listed by CNPS as plants about which more information is needed to determine their status and plants of limited distribution (Lists 3 and 4 in California Native Plant Society 2008) that may be included on the basis of local significance or recent biological information.

Special-status animals are species with one or more of the following characteristics:

- listed or proposed for listing as threatened or endangered under the ESA (50 CFR 17.11 [listed animals] and various notices in the Federal Register [proposed species]);
- candidate for possible future listing as threatened or endangered under the ESA (73 FR 7515–75244, December 10, 2008);
- determined to meet the definitions of rare or endangered under CEQA (State CEQA Guidelines, Section 15380);
- listed or candidate for listing by the State of California as threatened or endangered under CESA (14 CCR 670.5);
- wildlife species of special concern to CDFG (California Department of Fish and Game 2008);
- fully protected species under the California Fish and Game Code Section 3511 (birds), Section 4700 (mammals), Section 5515 (fish), and Section 5050 (reptiles and amphibians); and/or
- species with no formal special status but thought by experts to be rare or in serious decline and to warrant special status based on recent information.

1.3.3.3 Focal Species Criteria

For each special-status species with potential to occur in the study area (Appendices A and B), information was gathered on its status, population trends, distribution, threats, conservation potential, and management efforts. The following criteria were then applied to each species to determine whether it would be a focal species. To be a focal species, a species typically had to meet all four of the following criteria.

Range: The species is known to occur or is likely to occur within the Conservation Strategy study area, based on credible evidence, or the species is not currently known in the study area but is expected to occur in the study area in the foreseeable future (e.g., through range expansion or reintroduction to historic range).

Status: The species meets at least one of the following statutory criteria:

- listed under the ESA as threatened or endangered, or proposed for listing;
- listed under CESA as threatened or endangered or a candidate for such listing;
- listed under the Native Plant Protection Act as rare; or
- expected to be listed under ESA or CESA in the foreseeable future. Potential for listing is based on current listing status, consultation with experts and wildlife agency staff, evaluation of species population trends and threats, and best professional judgment of the biologists working on the Conservation Strategy.

Impact: The species or its habitat would be adversely affected by activities or projects that may result in take of the species.

Data: Sufficient data on the species' life history, habitat requirements, and occurrence in the study area are available to adequately evaluate and develop conservation measures to mitigate impacts that result from future projects to levels specified by regulatory standards.

1.4 Regulatory Setting

1.4.1 Federal and State Endangered Species Laws

1.4.1.1 Federal Endangered Species Act

USFWS and National Marine Fisheries Service (NMFS) administer the ESA. ESA requires USFWS and NMFS to maintain lists of threatened and endangered species and affords substantial protection to listed species. NMFS's jurisdiction under ESA is limited to the protection of marine plants and animals, and anadromous fishes;² all other species are subject to USFWS jurisdiction.

² *Anadromous fishes* are fish that spend part of their life cycle in the ocean and part in fresh water. NMFS has jurisdiction over anadromous fish that spend the majority of their life cycle in the ocean. Pacific Lamprey, although anadromous, would be under USFWS jurisdiction if it were listed in the future because, although anadromous, it spends the majority of its life cycle in freshwater.

USFWS and NMFS can list species as either *endangered* or *threatened*. An *endangered* species is at risk of extinction throughout all or a significant portion of its range (ESA Section 3[6]). A *threatened* species is likely to become endangered within the foreseeable future (ESA Section 3[19]). Section 9 of the ESA prohibits the take of any fish or wildlife species listed under ESA. *Take*, as defined by ESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” *Harm* is defined as “any act that kills or injures the species, including significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering” (50 CFR 17.3). Section 9 prohibits removing or reducing to possession, or maliciously damaging or destroying listed plant species from areas under federal jurisdiction and includes prohibiting removal, cutting, digging up, damage, or destruction where the action takes place in violation of any state law or regulation. ESA and its implementing regulations do not provide for exemption from these prohibitions; however, listed plants are subject to the regulatory obligations of section 7 of the ESA. Some plants are included in the Conservation Strategy in order to meet regulatory obligations under ESA Section 7 and to comply with CESA.

The ESA includes mechanisms that provide exceptions to the Section 9 take prohibitions. These are addressed in Section 7 for federal actions and Section 10 for nonfederal actions.

Section 7

Section 7 of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of habitat critical to such species’ survival. To ensure that its actions do not result in jeopardy to listed species or in the adverse modification of critical habitat³, each federal agency must consult with USFWS or NMFS, or both, regarding federal agency actions that may affect listed species. Consultation begins when the federal agency submits a written request for initiation to USFWS or NMFS, along with the agency’s biological assessment of its proposed action, and their determination that the proposed action “may affect but is not likely to adversely affect” or “may affect and is likely to adversely affect” listed species. If the initiation package is complete, USFWS or NMFS concurs or does not concur with the federal action agency’s determination. If USFWS or NMFS concurs that the action will not likely adversely affect the listed species, the action may be conducted without further review under ESA. Otherwise, USFWS or NMFS must prepare a written biological opinion describing how the agency’s

³ *Critical habitat* is defined as specific geographic areas, whether occupied by listed species or not, that are determined to be essential for the conservation and management of listed species, and that have been formally described in the Federal Register.

action may or may not jeopardize the continued existence of a species or result in the adverse modification of critical habitat.

If the biological opinion concludes that the proposed action would jeopardize the continued existence of a listed species or adversely modify its critical habitat, the opinion will suggest “reasonable and prudent alternatives” that would avoid that result. If the biological opinion concludes that the proposed action would take a listed species but would not jeopardize its continued existence, the biological opinion will include an *incidental take statement*. *Incidental take* is take that is “incidental to, and not intended as part of, an otherwise lawful activity” (64 CFR 60728). The incidental take statement specifies an amount of take that is allowed to occur as a result of the action and may require reasonable and prudent measures to minimize the effect of the take.

Any project with a federal lead agency or federal involvement (e.g., a federal permit, federal funding, or a project on federal land) must obtain its take authorization through Section 7 rather than Section 10 and an HCP.

Section 10

Until 1982, state, local, and private entities had no means to acquire incidental take authorization as could federal agencies under Section 7. Private landowners and local and state agencies risked direct violation of the ESA no matter how carefully their projects were implemented. This statutory dilemma led Congress to amend Section 10 of the ESA in 1982 to authorize the issuance of an incidental take permit to nonfederal project proponents upon completion of an approved conservation plan. The term *conservation plan* has evolved into *HCP*.

In cases where federal land, funding, or authorization is not required for an action by a nonfederal entity, the take of listed fish and wildlife species can be permitted by USFWS and/or NMFS through the Section 10 process. Private landowners, corporations, state agencies, local agencies, and other nonfederal entities must obtain a Section 10(a)(1)(B) *incidental take permit* for take of federally listed fish and wildlife species “that is incidental to, but not the purpose of, otherwise lawful activities.”

The take prohibition for listed plants is more limited than for listed fish and wildlife. Under Section 9(a)(2)(B) of the ESA, endangered plants are protected from “removal, reduction to possession, and malicious damage or destruction” in areas that are under federal jurisdiction. Section 9(a)(2)(B) of the ESA also provides protection to plants from removal, cutting, digging up, damage, or destruction where the action takes place in violation of any state law or regulation or in violation of a state criminal trespass law. Thus, the ESA does not prohibit the incidental take of federally listed plants on private or other

nonfederal lands unless the action requires federal authorization or is in violation of state law. Thus, Section 10 incidental take permits are only required for wildlife and fish species. However, the Section 7(a)(2) prohibition against jeopardy applies to plants, and issuance of a Section 10(a)(1)(B) incidental take permit cannot result in jeopardy to a listed plant species.

The HCP must specify the following mandatory elements (U.S. Fish and Wildlife Service and National Marine Fisheries Service 1996):

- impacts that will likely result from the taking of covered species;
- steps the applicant will take to monitor, minimize, and mitigate such impacts to the maximum extent practicable;
- funding that will be available to implement such steps;
- procedures to be used to deal with unforeseen circumstances;⁴
- alternative actions to such taking the applicant considered and the reasons why such alternatives are not proposed to be utilized; and
- such other measures that the Director [of the Department of Interior or Commerce] may require as being necessary or appropriate for purposes of the Conservation Strategy (50 CFR 17.22(b)).

The following criteria must be met in order for USFWS and/or NMFS to issue a section 10(a)(1)(B) incidental take permit:

- taking will be incidental;
- impacts of the taking will be minimized and mitigated to the maximum extent practicable;
- adequate funding will be ensured;
- taking will not appreciably reduce the likelihood of survival and recovery of the species in the wild; or
- other such measures that USFWS and/or NMFS may require as being necessary or appropriate for purposes of the HCP (50 CFR 17.22).

An HCP is intended to satisfy these requirements.

Prior to the approval of an HCP, USFWS and/or NMFS are required to undertake an *internal* Section 7 consultation, because issuance of an incidental take permit is a federal action (see discussion of ESA in “Section 7,” above.) Elements specific to the Section 7 process that are not required under the Section 10 process (e.g., analysis of effects on designated critical habitat, analysis of effects

⁴ *Unforeseen circumstances* are changes in circumstances affecting a covered species or geographic area covered by the HCP that could not reasonably have been anticipated by the plan developers, and that result in a substantial and adverse change in the status of a covered species.

on listed plant species, and analysis of indirect and cumulative effects on listed species) are included in an HCP to meet the requirements of Section 7.

While the Conservation Strategy is not an HCP, the discussion of these regulatory documents are relevant since there are three HCP's currently being developed within the Conservation Strategy study area. The Conservation Strategy does provide a regional approach to conservation which is a similar approach for an HCP. The Conservation Strategy does not provide an estimate of impacts to species or their habitats during a designated period of time as an HCP would, nor does it provide a specific mitigation program to offset those estimated impacts. Those are required elements of an HCP that are not part of the Conservation Strategy.

1.4.1.2 California Endangered Species Act

CESA prohibits take of wildlife and plants listed as threatened or endangered by the California Fish and Game Commission. *Take* is defined under the California Fish and Game Code (more narrowly than under ESA) as any action or attempt to “hunt, pursue, catch, capture, or kill.” Therefore, take under CESA does not include “the taking of habitat alone or the impacts of the taking.”⁵ Rather, the courts have affirmed that under CESA, “taking involves mortality.”

Like ESA, CESA allows exceptions to the prohibition for take that occurs during otherwise lawful activities. The requirements of an application for incidental take under CESA are described in Section 2081 of the California Fish and Game Code. Incidental take of state-listed species may be authorized if an applicant submits an approved plan that minimizes and “fully mitigates” the impacts of this take.

This Conservation Strategy provides information on state-listed species that would be used by project proponents and local jurisdictions to determine whether a proposed project could result in take of a state listed species. In addition, avoidance and minimization measures and mitigation practices outlined in the Conservation Strategy would be referenced by the project proponent when creating a plan that minimizes and fully mitigates the impacts of the project. By utilizing preapproved mitigation practices and focusing mitigation in conservation priority areas described in the Conservation Strategy, CESA permit compliance would be streamlined.

1.4.1.3 Natural Community Conservation Planning Act

California’s Natural Community Conservation Planning Act (NCCPA) (California Fish and Game Code, Section 2800 et seq.) was enacted to implement broad-

⁵ *Environmental Council of Sacramento v. City of Sacramento*, 142 Cal. App. 4th 1018 (2006).

based planning that balances appropriate development and growth with conservation of wildlife and habitat. Pursuant to the NCCPA, local, state, and federal agencies are encouraged to prepare NCCPs to provide comprehensive management and conservation of multiple species and their habitats under a single plan, rather than through preparation of numerous individual plans on a project-by-project basis. The NCCPA is broader in its orientation and objectives than ESA and CESA, and preparation of an NCCP is voluntary. The primary objective of the NCCP program is to conserve natural communities at the ecosystem scale while accommodating compatible land use. To be approved by CDFG, an NCCP must provide for the conservation of species and protection and management of natural communities in perpetuity within the area covered by permits. *Conservation* is defined by the NCCPA and the California Fish and Game Code as actions that result in the delisting of state-listed species. Thus, NCCPs must contribute to the recovery of listed species or prevent the listing of nonlisted species rather than just mitigate the effects of covered activities. This recovery standard is one of the major differences between an NCCP and an HCP prepared to satisfy ESA or CESA.

To approve an NCCP under the NCCPA, CDFG must make the following series of findings.

- The NCCP must be consistent with the NCCPA.
- The NCCP must provide for the conservation and management of the covered species (*conservation* here is defined to mean that the NCCP must contribute to species recovery).
- The NCCP must protect habitat, natural communities, and species diversity on the landscape level (definitions of these and other NCCP terms are provided in Appendix C, “Glossary”).
- The NCCP must conserve the ecological integrity of large habitat blocks, ecosystem function, and biodiversity.
- The NCCP must support sustainable populations of covered species.
- The NCCP must provide a range of environmental gradients and habitat diversity to support shifting species distributions.
- The NCCP must sustain movement of species among reserves.
- Mitigation and conservation must be roughly proportional to impacts in timing and extent.
- Funding for conservation, monitoring, and adaptive management must be adequately assured.

Although the Conservation Strategy is not an NCCP, the discussion of these regulatory documents are relevant since the proposed Altamont Wind Resources Conservation Plan, which is an NCCP, is currently in process in the Conservation Strategy study area. The Conservation Strategy does not provide an estimate of impacts to species or their habitats during a designated period of

time as an NCCP would, nor does it provide a specific mitigation program to offset those estimated impacts and contribute to the recovery of species. Further, the Conservation Strategy does not have a formal scientific advisory process, as is required for an NCCP. The Conservation Strategy does have a stakeholder process, through the UAG, which is something that is required to prepare an NCCP. The Conservation Strategy does provide a regional approach to conservation, as an NCCP would, and approaches conservation through focal species and their habitats at both a local and regional scale. This is similar to the approach required in NCCPs.

1.4.2 Other Federal and State Species Laws

1.4.2.1 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 as amended (MBTA), implements various treaties and conventions between the U.S., Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA, it is illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to federal regulations (16 United States Code [USC] 703). The regulatory definition of *take*, as defined by 50 CFR 10.12, *means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt hunt, shoot, wound, kill, trap, capture, or collect*. As such, *take* under the MBTA does not include the concepts of harm and harassment as defined under ESA. The MBTA defines migratory birds broadly; all covered birds in this Conservation Strategy are considered migratory birds under the MBTA.

USFWS provides guidance regarding take of federally listed migratory birds (Appendix 5 in the HCP Handbook [U.S. Fish and Wildlife Service and National Marine Fisheries Service 1996]). According to these guidelines, an incidental take permit can function as a Special Purpose Permit under the MBTA (50 CFR 21.27) for the take of all ESA-listed covered species in the amount and/or number and subject to the terms and conditions specified in an HCP. Any such take will not be in violation of the MBTA (16 USC 703–12). The following focal species in the Conservation Strategy are protected by the MBTA:

- golden eagle,
- western burrowing owl, and
- tricolored blackbird.

None of these species are currently listed under ESA or CESA therefore, take cannot be authorized or permitted. Focal bird species, as well as other migratory birds not listed as focal species by the Conservation Strategy, will benefit from seasonal restrictions on construction, restrictions on removal of

nesting habitat during the nesting period, and other conservation measures described in this Conservation Strategy. Individual project applicants will be responsible for compliance with the MBTA for migratory birds.

1.4.2.2 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (Eagle Act) prohibits the taking or possession of and commerce in bald and golden eagles with limited exceptions. Under the Eagle Act, it is a violation to “take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof.” *Take* is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, and disturb. *Disturb* is further defined in 50 CFR Part 22.3 as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

Recent revisions to the Eagle Act authorizes take of bald eagles and golden eagles under the following conditions: (1) where the take is compatible with the preservation of the bald eagle and golden eagle; (2) take is necessary to protect an interest in a particular locality; (3) take is associated with but not the purpose of an otherwise lawful activity; and (4) for individual instances of take, the take cannot be avoided; or (5) for programmatic take, the take is unavoidable even though advanced conservation practices are being implemented (50 CFR 22.26). Permits issued under this regulation usually authorize disturbance only; however, in limited cases a permit may authorize lethal take that results from but is not the purpose of an otherwise lawful activity.

1.4.2.3 California Fully Protected Species

In the 1960s, before CESA was enacted, the California legislature identified specific species for protection under the California Fish and Game Code. These *fully protected* species may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of bird species for the protection of livestock. Fully protected species are described in Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These protections state that “no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected [bird], [mammal], [reptile or amphibian], [fish].” This Conservation Strategy includes conservation measures to avoid taking fully protected species as defined by the California Fish and

Game Code. The only fully protected species listed as focal species by the Conservation Strategy is golden eagle. Other fully protected species expected to occur in the study area include, but are not restricted to:

- American peregrine falcon,
- bald eagle,
- white-tailed kite, and
- ring-tailed cat (ringtail).

1.4.2.4 California Fish and Game Code 3503 (Bird Nests)

Section 3503 of the California Fish and Game Code makes it “unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” The Conservation Strategy contains conservation measures to avoid and minimize such take to the maximum extent practicable in order to comply with Section 3503. Individual project applicants will be responsible for compliance with Section 3503 of the California Fish and Game Code for bird nests.

1.4.2.5 California Fish and Game Code 3503.5 (Birds of Prey)

Section 3503.5 of the California Fish and Game Code prohibits the take, possession, or destruction of any birds of prey or their nests or eggs “except as otherwise provided by this code or any regulation adopted pursuant thereto.” The only birds of prey covered by the Conservation Strategy are golden eagle and western burrowing owl (Table 1-1). Golden eagle is fully protected; therefore, no take of individuals is allowed. The Conservation Strategy contains conservation measures to avoid take of golden eagle and avoid and minimize take of western burrowing owl in order to comply with Section 3503.5. Individual project applicants will be responsible for compliance with Section 3503.5 of the California Fish and Game Code for birds of prey.

1.4.3 National Environmental Policy Act

NEPA requires federal agencies to include in its decision-making process appropriate and careful consideration of all environmental effects of a proposed action and of possible alternatives. Documentation of the environmental impact analysis and efforts to avoid or minimize the adverse effects of proposed actions must be made available for public notice and review. This analysis is documented in either an environmental assessment or an environmental impact

statement. Project proponents must disclose in these documents whether their proposed action will adversely affect the human or natural environment. NEPA's requirements are primarily procedural rather than substantive in that NEPA requires disclosure of environmental effects and mitigation possibilities but includes no requirement to mitigate.

1.4.4 California Environmental Quality Act

CEQA is similar to but more extensive than NEPA in that it requires that significant environmental impacts of proposed projects be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless overriding considerations are identified and documented that make the mitigation measures or alternatives infeasible. CEQA applies to certain activities in California undertaken by either a public agency or a private entity that must receive some discretionary approval from a California government agency.

Future projects that occur in the Conservation Strategy study area must also comply with CEQA at the project level through local jurisdictions. It is expected that the avoidance and minimization measures, mitigation standards, and conservation actions outlined in this Conservation Strategy will be sufficient to inform biological resource issues that arise during the project-level CEQA process in the future. Avoidance and minimization measures as well as standardized mitigation practices for focal species and sensitive habitats would be used to develop mitigation.

Many of the conservation measures will also benefit other special-status species (i.e., species that are not focal species under the Conservation Strategy); such measures may be sufficient to meet CEQA standards for these other species as well.

1.4.5 Federal and State Wetland Laws and Regulations

1.4.5.1 Clean Water Act Section 404

The Clean Water Act (CWA) is the primary federal law that protects the physical, chemical, and biological integrity of the nation's waters, including lakes, rivers, wetlands, and coastal waters. Programs conducted under the CWA are directed at both point source pollution (e.g., waste discharged from outfalls and filling of waters) and nonpoint source pollution (e.g., runoff from parking lots). Under Section 402 of the CWA, the U.S. Environmental Protection Agency (EPA) and state agencies set effluent limitations and issue permits governing point-source discharges of wastes to waters. The Corps, applying its regulations under guidelines issued by EPA, issues permits under CWA Section 404 governing

under what circumstances dredged or fill material may be discharged to waters. Section 402 and 404 permits are the primary regulatory tools of the CWA. EPA has oversight over all CWA permits issued by the Corps.

The Corps issues two types of permits under Section 404: general permits (either nationwide permits or regional permits) and standard permits (either letters of permission or individual permits). General permits are issued by the Corps to streamline the Section 404 process for nationwide, statewide, or regional activities that have minimal direct or cumulative environmental impacts on the aquatic environment. Standard permits are issued for activities that do not qualify for a general permit (i.e., that may have more than a minimal adverse environmental impact).

Although the Conservation Strategy will not provide permits under Section 404 of the CWA for impacts on wetlands or other waters, Section 404 permitting is expected to be streamlined substantially as a result. Issuance of a Section 404 permit often requires the Corps to consult with USFWS and/or NMFS to comply with Section 7 of the ESA. This consultation would address the federally listed species that could be impacted as the result of changes to or loss of wetland habitat. The USFWS will write a Programmatic Biological Opinion for activities that need Section 404 permit issuance and are within the Conservation Strategy study area.

1.4.5.2 Clean Water Act Section 401 and the Porter-Cologne Water Quality Control Act

Under CWA Section 401, states have the authority to certify federal permits for discharges to waters under state jurisdiction. States may review proposed federal permits (e.g., Section 404 permits) for compliance with state water quality standards. The permit cannot be issued if the state denies certification. In California, the State Water Resources Control Board (State Board) and the Regional Water Quality Control Boards (Regional Boards) are responsible for the issuance of Section 401 certifications.

The Porter-Cologne Water Quality Control Act is the primary state law concerning water quality. It authorizes the State Board and Regional Boards to prepare management plans such as regional water quality plans to address the quality of groundwater and surface water. The Porter-Cologne Water Quality Control Act also authorizes the Regional Boards to issue waste discharge requirements defining limitations on allowable discharge to waters of the state. In addition to issuing Section 401 certifications on Section 404 applications to fill waters, the Regional Boards may also issue waste discharge requirements for such activities. Because the authority for waste discharge requirements is derived from the Porter-Cologne Water Quality Control Act and not the CWA, waste discharge requirements may apply to a somewhat different range of aquatic resources than do Section 404 permits and Section 401 water quality

certifications. Applicants that obtain a permit from the Corps under Section 404 must also obtain certification of that permit by the Regional Board. The Conservation Strategy does not include certifications under Section 401 or waste discharge permits under the Porter-Cologne Water Quality Control Act. These authorizations, if required, must be obtained separately.

1.4.5.3 Lake or Streambed Alteration Agreement

CDFG has jurisdictional authority over streams, lakes, and wetland resources associated with these aquatic systems under California Fish and Game Code Section 1600 et seq. CDFG has the authority to regulate work that will “substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.” Activities of any person, state, or local governmental agency, or public utility are regulated by CDFG under Section 1602 of the code. CDFG enters into a streambed or lakebed alteration agreement with the project proponent and can impose conditions on the agreement to ensure no net loss of values or acreage of the stream, lake, associated wetlands, and associated riparian habitat.

The lake or streambed alteration agreement is not a permit, but rather a mutual agreement between CDFG and the project proponent. Because CDFG includes under its jurisdiction streamside habitats that may not qualify as wetlands under the CWA definition, CDFG jurisdiction may be broader than Corps jurisdiction.

A project proponent must submit a notification of streambed alteration to CDFG before construction. The notification requires an application fee for streambed alteration agreements, with a specific fee schedule to be determined by CDFG. Many of the concerns raised by CDFG during streambed alteration agreement negotiations are related to special-status species. Activities covered by this Conservation Strategy that need a streambed alteration agreement are expected to partially or fully meet the standards of the streambed alteration agreement through compliance with this Conservation Strategy.

1.5 Document Organization

This document is organized into the following six chapters:

- Chapter 1, “Introduction,”
- Chapter 2, “Environmental Setting,”
- Chapter 3, “Conservation Strategy,”
- Chapter 4, “Conservation Zones,”

- Chapter 5, “Conservation Strategy Implementation,” and
- Chapter 6, “Literature Cited.”

Chapter 2 provides information on existing natural resources within eastern Alameda County. Chapter 3 presents the conservation principles and approaches central to this Conservation Strategy and describes expected outcomes for focal species when the Conservation Strategy is implemented. Chapter 4 discusses the 18 conservation zones developed for this Conservation Strategy. Chapter 5 describes mitigation and land protection efforts integral to the success of the Conservation Strategy, as well as for the implementation oversight process. Chapter 6 provides a listing of the sources cited in the document or consulted in its preparation.

The report also contains the following appendices:

- Appendix A, “Wildlife Species Considered for Inclusion as Focal Species in the East Alameda Conservation Strategy,”
- Appendix B, “Plant Species Considered for Inclusion as Focal Species in the East Alameda Conservation Strategy,”
- Appendix C, “Glossary,”
- Appendix D, “Species Accounts,”
- Appendix E, “Focal Species Impact/Mitigation Scoring Sheets,”
- Appendix F, “Conservation Easement Toolkit,”
 - Conservation Easement Template
 - Management Plan Guide and Annotated Outline
 - Review Criteria for Section 7 Off-site Compensation
- Appendix G, “Water Quality Objectives for Use in Designing and Implementing Projects with Impacts to Creeks or Wetlands.”

Table 1-1. Species Proposed for Inclusion as Focal Species for the East Alameda County Conservation Strategy

Species	Status ^a			Criteria ^b				Recommended Focal Species ^c	Notes
	Federal	State	CNPS	Range	Status	Threat	Data		
Invertebrates									
Longhorn fairy shrimp <i>Branchinecta longiantenna</i>	FE	-	-	Y	Y	Y	Y	Y	Population in Brushy Peak Preserve in Livermore and adjacent private land.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT	-	-	Y	Y	Y	Y	Y	Occurrence information not well documented for study area. Three CNDDDB (2008) records in study area, presumed extant. Vernal pools in Springtown Alkali Sink support the species.
Callippe silverspot butterfly <i>Speyeria callippe callippe</i>	FE	-	-	Y	Y	N	N	Y	Limited knowledge about species in the study area; species is covered by the SFPUC Alameda Watershed HCP; recommend a limited conservation strategy.
Amphibians									
California tiger salamander <i>Ambystoma californiense</i>	FT	C	-	Y	Y	Y	Y	Y	Occurrences of species in study area; mitigation typically required under CEQA and ESA.
California red-legged frog <i>Rana aurora draytonii</i>	FT	CSC	-	Y	Y	Y	Y	Y	Occurrences of species in study area; mitigation typically required under CEQA and ESA.
Foothill yellow-legged frog <i>Rana boylei</i>	-	CSC	-	Y	N	Y	Y	Y	Species occurs in several fast moving streams in the study area. Conservation opportunities may be limited outside of additional protection of key reaches.
Reptiles									
Alameda whipsnake <i>Masticophis lateralis euryxanthus</i>	FT	ST	-	Y	Y	Y	Y	Y	Occurrences of species in study area; mitigation typically required under CESA and ESA.
Fish									
Central California coastal steelhead <i>Oncorhynchus mykiss</i>	FT	-	-	N	Y	N	Y	Y	This species will at least be included with a limited conservation strategy. A broader conservation strategy will be explored based on cost and commitments from NMFS.

Species	Status ^a			Criteria ^b				Recommended Focal Species ^c	Notes
	Federal	State	CNPS	Range	Status	Threat	Data		
Birds									
Golden eagle <i>Aquila chrysaetos</i>	BGPA, MBTA	CSC, FP	-	Y	Y	Y	Y	Y	Eastern Alameda County is important source population for region.
Tricolored blackbird <i>Agelaius tricolor</i>	MBTA	CSC	-	Y	Y	Y	Y	Y	Number of breeding colonies is in decline; could become federally or state listed; developing conservation for the species is difficult due to the ephemeral nature of breeding colonies. Species would benefit from wetland restoration in the study area.
Western burrowing owl <i>Athene cunicularia hypugea</i>	MBTA	CSC	-	Y	Y	Y	Y	Y	Species is in decline throughout Bay Area; may become state listed; mitigation typically required under CEQA.
Mammals									
American badger <i>Taxidea taxus</i>	-	CSC	-	Y	Y	Y	Y	Y	As more is learned about the species it could become state listed. Species could be a candidate for guiding conservation of movement corridors in grassland ecosystems.
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	FE	ST	-	Y	Y	Y	Y	Y	The Altamont Hills provide extensive breeding habitat and a critical linkage in the northern part of species' range.
Plants									
San Joaquin spearscale <i>Atriplex joaquiniana</i>	-	-	1B.2	Y	Y	Y	Y	Y	Covered in the East Contra Costa County HCP/NCCP.
Big tarplant <i>Blepharizonia plumosa</i>	-	-	1B.1	Y	Y	Y	Y	Y	Not expected to become listed in near future; road maintenance threatens some occurrences; covered in the East Contra Costa County HCP/NCCP.
Congdon's tarplant <i>Centromadia parryi</i> ssp. <i>congdonii</i>	-	-	1B.2	Y	Y	Y	Y	Y	Populations concentrated in areas subject to possible future development.
Palmate-bracted bird's-beak <i>Cordylanthus palmatus</i>	FE	SE	1B.1	Y	Y	Y	Y	Y	Occurrences in study area in Springtown Wetlands Preserve and on adjacent private lands; threats from potential changes in local hydrology and from recreational uses.

Species	Status ^a			Criteria ^b				Recommended Focal Species ^c	Notes
	Federal	State	CNPS	Range	Status	Threat	Data		
Livermore Valley tarplant <i>Deinandra bacigalupii</i>	-	-	1B.1	Y	Y	Y	Y	Y	Very rare within study area; high potential for impacts on populations.
Recurved larkspur <i>Delphinium recurvatum</i>	-	-	1B.2	Y	Y	Y	Y	Y	One occurrence in study area; covered in the East Contra Costa County HCP/NCCP.

Notes

^a **Status**

State Status

- FP = Fully protected
- SE = State listed as endangered
- ST = State listed as threatened
- SR = State listed as rare (plants only)
- CSC = California special concern species
- C = State candidate species

Federal Status

- BGPA = Bald Eagle and Golden Eagle Protection Act
- MBTA = Migratory Bird Treaty Act
- FE = Federally endangered
- FT = Federally threatened

California Native Plant Society Ranking

- 1B = Rare or endangered in California and elsewhere

Native Plant Threat Rankings

- .1 = Seriously threatened in California (high degree/immediacy of threat)
- .2 = Fairly threatened in California (moderate degree/immediacy of threat)

^b **Criteria**

Range: The species is known to occur or is likely to occur within the Conservation Strategy study area, based on credible evidence, or the species is not currently known in the study area but is expected in the study area in the foreseeable future (e.g., through range expansion or reintroduction to historic range).

Status: The species is either:

- listed under the federal ESA as threatened or endangered, or proposed for listing;
- listed under CESA as threatened or endangered or a candidate for such listing, or listed under the Native Plant Protection Act as rare; or
- expected to be listed under ESA or CESA within the permit term. Potential for listing during the permit term is based on current listing status, consultation with experts and Wildlife Agency staff, evaluation of species population trends and threats, and best professional judgment.

Impact: The species or its habitat would be adversely affected by project related activities in Alameda County.

Data: Sufficient data exist on the species' life history, habitat requirements, and occurrence in the study area to adequately evaluate impacts on the species and to develop conservation measures to mitigate these impacts to levels specified by regulatory standards.

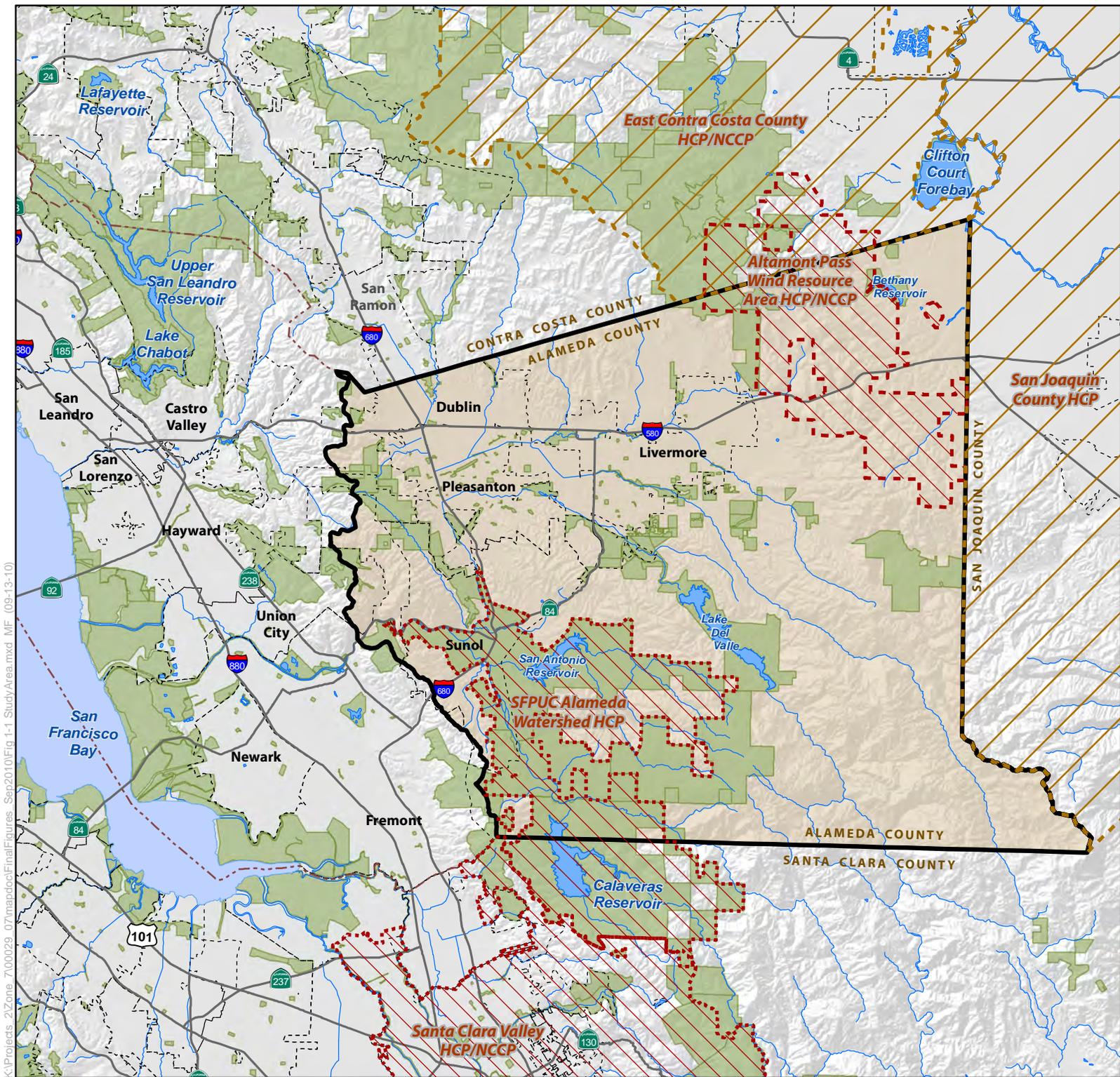
Species proposed as focal species were limited to those species for which impacts from project in the county were likely, or for which mitigation is often required under CEQA or ESA. However, many other special-status species are expected to benefit from the Conservation Strategy.

^c **Recommended Status**

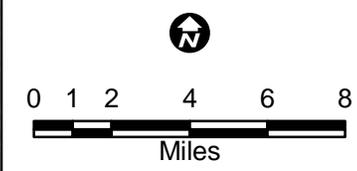
- Y = recommended as a focal species for East Alameda County Conservation Strategy
- N = not recommended as focal species for East Alameda County Conservation Strategy

**Figure 1-1
Study Area
East Alameda County**

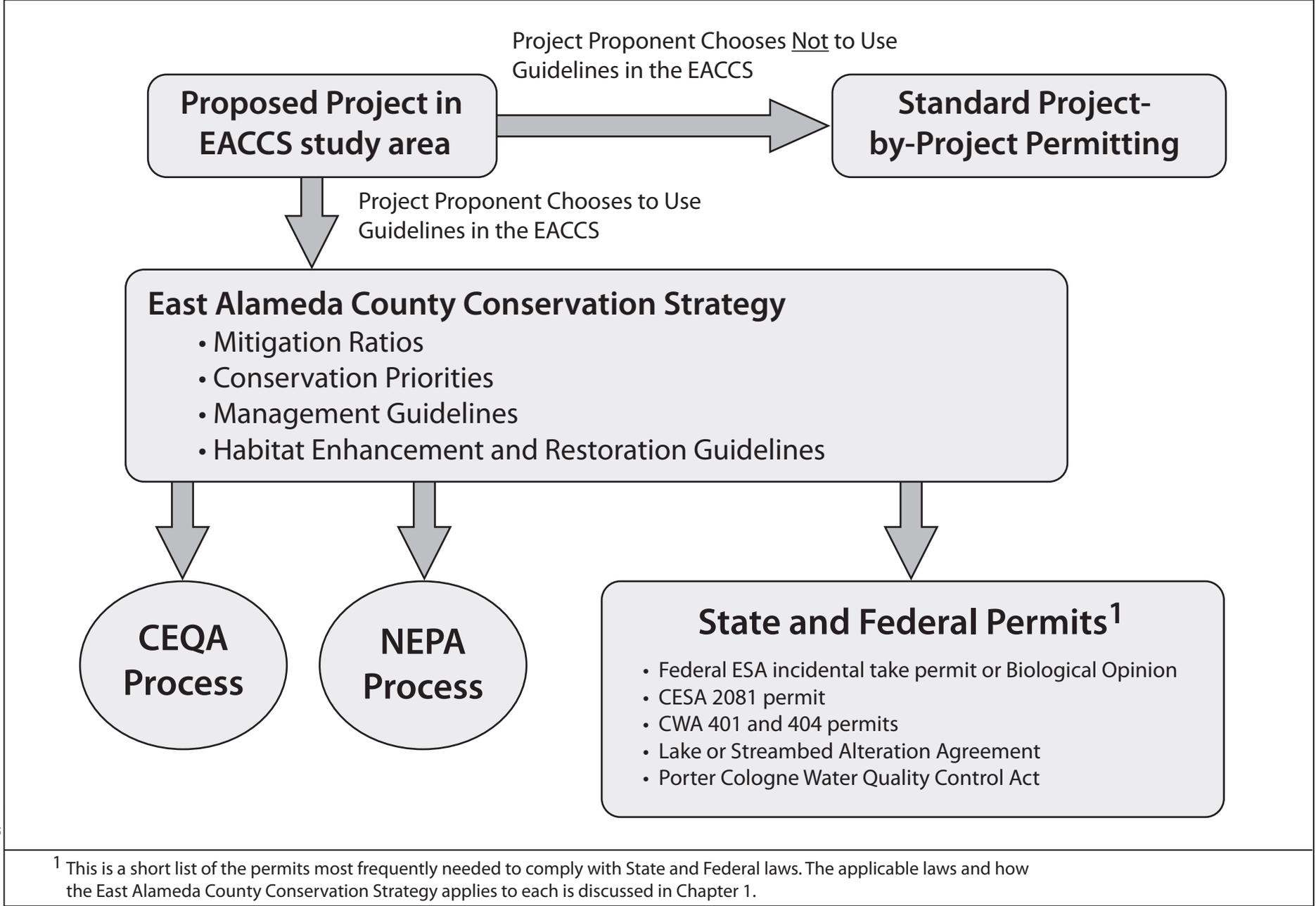
October 2010



- Proposed Study Area Boundary
- Approved HCPs and NCCPs in and Adjacent to the Study Area
- In-Process HCPs and NCCPs in and Adjacent to the Study Area
- Parks and Protected Areas
- County Line
- Highways
- Streams
- Reservoirs



K:\Projects_2\Zone_7\00029_07\mapdocs\FinalFigures_Sep2010\Fig 1-1_StudyArea.mxd MF (09-13-10)



0090608 Strategy (rev. 3-09)