Comment Letter E

CENTER FOR BIOLOGICAL DIVERSITY

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Sent via facsimile on 12/1/05 to (916) 414-6713 and (925) 335-1299

Re: Draft EIR/EIS for East Contra Costa County HCP

Dear Mr. Kopchik and Ms. Rinek:

These are comments of the Center for Biological Diversity on the draft East Contra Costa County HCP/NCCP and the draft EIR/EIS for the HCP/NCCP adoption.

Destruction or Adverse Modification of Critical Habitat

The proposed East Contra Costa County Habitat Conservation Plan ("Plan") intends to illegally authorize destruction or adverse modification of designated Critical Habitat for federally listed species. Protection of Critical Habitat is the cornerstone of the Endangered Species Act (ESA). Critical Habitat designation is intended to preserve the habitat areas essential for the conservation and recovery of listed species, by providing protection of areas not currently occupied by the species and protecting essential habitat from destruction or adverse modification. Scientific studies have shown that species with their critical habitats protected by the Endangered Species Act are twice as likely to be recovering as those that do not. E-1

Section 10 of the ESA prohibits any activity authorized by a federal agency to destroy or adversely modify designated Critical Habitat for listed species. Because the U. S. Fish and Wildlife Service (USFWS) will be issuing a federal permit to participating jurisdictions for the Plan, the Plan cannot legally allow any destruction or adverse modification of Critical Habitat for covered species.

The Plan acknowledges that designated Critical Habitat for vernal pool fairy shrimp, longhorn fairy shrimp, and Contra Costa goldfields occur within the Plan area. The Plan area covers 750 acres of Critical Habitat for longhorn fairy shrimp, 140 acres of Critical Habitat for vernal pool fairy shrimp, and 148 acres of Critical Habitat for Contra Costa goldfields. The Plan contends that

"almost all" the lands designated as critical habitat for these species are either already preserved or are "proposed for preservation" under the Plan. Preserving "almost all" of the Critical Habitat for these species or "proposing" protection of these lands does not meet the legal obligations of the USFWS to prohibit destruction or adverse modification of these lands. The urban development, infrastructure projects and other covered activities contemplated under the Plan will almost certainly result in destruction or modification of Critical Habitat if allowed in these areas. All acreage of Critical Habitat within the Plan area should be removed from any development or disturbance and preserved in a manner to benefit the recovery of the affected species that is consistent with Section 10 of the ESA.

The USFWS and the Plan have proposed that lands within the Plan area will not be designated as critical habitat for the California red-legged frog, California tiger salamander, or Alameda whipsnake. It is our contention that the proposed Plan does not adequately protect these species not their critical habitat since it allows development and degradation of areas identified in the listing process or in recovery plans for the affected species as being essential for the conservation and recovery of the species. Furthermore, the minimal and speculative mitigations contemplated in the Plan do not adequately mitigate the loss of habitat identified as essential for recovery of these species. E-2

The Plan notes that Critical Habitat was proposed for the California red-legged frog in April of 2004 and for the California tiger salamander in August of 2004. Final Critical Habitat for the tiger salamander was designated in August of 2005 and Critical Habitat for the red-legged frog was re-proposed in November of 2005. Additionally, Critical Habitat for the Alameda whipsnake was re-proposed in October of 2005. We have not had time to adequately review these new Critical Habitat designations and the USFWS has not published detailed maps to be able to determine whether lands within the Plan area are or are not included in these designations. The EIR/EIS for the Plan needs to analyze whether Critical Habitat for any of these three species is designated or will be designated within the Plan area. If so, all acreage of Critical Habitat within the Plan area for these three species should also be removed from any development or disturbance and preserved in a manner to benefit the recovery of the affected species that is consistent with Section 10 of the ESA.

Requirements of the HCP

The requirements under Section 10 of the ESA, along with USFWS regulations, policy guidance, and case law interpreting them, provide the basis for the concepts and standards for legally sound HCPs. The case law that exists interpreting the requirements for take permits and HCPs strongly supports a strict interpretation of the requirements in favor of conservation of covered species. Applicants for take permits and the USFWS must adhere to certain principles in order to craft sound HCPs:

- the HCP must minimize and mitigate take of covered species "to the maximum extent practicable"

- the HCP must not "appreciably reduce the likelihood of survival and recovery" of imperiled species substantially worsen the covered species' prospects for survival and recovery

- the HCP must provide additional biological protections where feasible

- the HCP must ensure adequate funding to carry and implement the HCP

- the HCP must specify any harmful effects of permitted take

- The permitted activities in the HCP must be incidental to otherwise lawful activities

Most approved HCPs suffer from problems with inadequate mitigation measures, funding, and monitoring. A 1999 study of existing HCPs concluded that almost one-third of the HCPs allowed take of 100% of the focal species' populations or habitat in the permit area and one-half of the HCPs allowed 50% or more of the focal species' populations or habitat to be taken.[1]

We share the concerns stated in the comments by the Friends of the Swainson's Hawk that the mitigation program described in the Plan does not assure that there is adequate funding for the required mitigation. We are concerned that the fee-based mitigation program for the Plan will not be adequate to guarantee mitigation, and will not generate sufficient funds to purchase the desired mitigation land at the costs estimated in the Plan. We also share their concerns about the proposed "Stay Ahead" provision. Project developers should be required to purchase and preserve suitable mitigation habitat meeting the requirements identified by the Plan before any permits are issued that would allow destruction of habitat, such as grading permits. E-3 E-4 E-5

The Plan's evaluation of the alternatives to take is completely inadequate and specious. The Plan's alternatives analysis assumes urban development must and should proceed everywhere it is proposed in the Plan area and to the extent of all urban limit lines. The Plan also assumes the impacts of this urban development on the Alameda whipsnake, San Joaquin kit fox, California red-legged frog, and California tiger salamander are inevitable and necessary. The Plan did not adequately consider alternatives, such as housing infill projects and avoidance of suitable habitat for listed species, that would reduce take below levels anticipated for the proposed project or alternatives that would avoid take and hence not require a permit from USFWS. E-6

Species-Specific Comments

Alameda whipsnake, San Joaquin kit fox, California red-legged frog, and California tiger salamander

The Plan allows unacceptable levels of take and habitat destruction for these species, all of which are extremely restricted in range. Eastern Contra Costa County provides significant and essential habitat for these four focal species. The plan does not adequately protect uplands habitat or maintain corridors essential for movement, migration and genetic interchange for these species. The plan also allows urbanization of habitat identified as essential for the recovery of these species in recovery plans published by the USFWS. E-7

Western Pond Turtle

The western pond turtle is not adequately protected in the proposed Plan. The pond turtle uses a complex matrix of terrestrial and aquatic habitats; in lake systems they can over-winter in the water, and in swamp/marsh systems they can leave the water and over-winter in a variety of vegetation types. Nest sites may be extremely localized and clustered and are usually characterized by compact soils, sparse vegetative cover, and a south, east or west facing aspect. The proposed Plan's broad characterization of habitat types provides little assurance that the microhabitat features important to the pond turtle will be protected. Loss and alteration of aquatic and terrestrial habitats resulting from dams, water diversions, and stream channelization and E-8

[1] Kareiva, P., S. Andelman, D. Doak, B. Elderd, M. Groom, J. Hoekstra, L. Hood, F. James, J. Lamoreux, G. LeBuhn, C. McCulloch, J Regetz, L. Savage, M. Ruckelshaus, D. Skelly, H. Wilbur, K. Zamudio, and NCEAS HCP Working Group. 1999. Using science in Habitat Conservation Plans. National Center for Ecological Analysis & Synthesis, Santa Barbara, California, and the American Institute of Biological Sciences, Washington, D.C., USA.

urban development in adjacent upland areas is probably the greatest threat to this species. Management activities such as restoration of aquatic habitats and establishing road under-crossings are not included in the Plan objectives, although these actions are critical to the survival and recovery of the western pond turtle. E-8 (Cont.)

Tricolored Blackbird

The tricolored blackbird is not adequately protected in the proposed Plan. The destruction of active tricolor nests and birds on agricultural lands is one of the most serious threats to this species. The EIR/EIS for the Plan should include information about the status and threats to the species contained in the *Petition to list Tricolored Blackbird under the State and Federal Endangered Species Acts*.[2] E-9

Swainson's Hawk

The Swainson's hawk is not adequately protected in the proposed Plan. We concur with the comments of the Friends of the Swainson's Hawk and the Swainson's Hawk Technical Advisory Committee on the Plan's poor scientific treatment of Swainson's hawk population, needs and mitigation requirements. We also concur with their comments that the Plan will allow unmitigated take of Swainson's hawks to occur for the duration of the permit period, without clear benefit to the species. E-10

Western Burrowing Owl

The western burrowing owl is not adequately protected in the proposed Plan. Most significantly, the Plan promotes passive relocation of owls away from currently occupied nesting areas. There is ample evidence that improper passive relocation is detrimental to burrowing owls and can lead to local extirpations.[3] E-11

For most passive relocations conducted in California, there is no way of knowing where the evicted owls go or whether they are able to breed successfully in other areas. The consultants that are hired to do this work do not conduct studies (e.g., color banding or radio-tracking) that evaluate the success of passive relocation and developers rarely have any interest in the fate of the owls beyond moving them out of the way of development projects.

If the process of passive relocation is properly refined and used appropriately, it has the potential to be an important conservation tool, for example when applied to permanently protected lands such as large military reservations, used to discourage nesting in close proximity to airport runways, or used to avoid take for temporary disturbances (such as pipelines, paving, etc.) by moving owls short distances. Passive relocation of owls can work if the birds are moved short distances (i.e.under 5 miles) and the habitat they are moved to is managed for them. Burrowing owls should never be translocated or forced to move to unprotected private property. Predators must also be taken into consideration - if owls are moved from an urban area where they have only been exposed to feral cats, red-tailed hawks and northern harriers, they will probably do poorly if moved to an area with coyotes or red foxes. E-12

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2 Center for Biological Diversity (CBD). 2004. Petition to list Tricolored Blackbird under the State and Federal Endangered Species Acts and Request for Emergency Action to Protect the Species. World wide web publication: http://www.biologicaldiversity.org/swcbd/species/tricolored/petition.pdf.

3 Center for Biological Diversity (CBD). 2003. Petition to the State of California Fish and Game Commission and Supporting Information for Listing the California Population of the Western Burrowing Owl (*Athene cunicularia hypugaea*) as an Endangered or Threatened Species Under the California Endangered Species Act. World wide web publication: http://www.biologicaldiversity.org/swcbd/species/b-owl/petition.pdf.

In addition, fragmentation of remaining grassland habitat has been shown to increase populations of burrowing owl predators. In fragmented landscapes, burrowing owls may forage greater distances within larger home ranges and spend more time away from the nest, making them more vulnerable to predators. Fragmented agricultural landscapes may also increase vehicle collisions with owls. Loss of foraging habitat and increased predation and vehicle collisions associated with urbanization were not adequately analyzed in the burrowing owl section. Also, the burrowing owl uses agricultural lands extensively for foraging. The loss of agricultural land contemplated in the Plan would significantly impact the burrowing owl, which is known to forage in agricultural fields. E-13

Sincerely,

Jeff Miller
Bay Area Wildlands Coordinator
Center for Biological Diversity

Response to Letter E, from the Center for Biological Diversity

Response to Comment E-1 and E-2

In response to the HCP/NCCP, the commenter states that preserving "almost all" of the critical habitat or "proposing" protection of critical habitat does not meet the legal obligations of the Service to prohibit destruction or adverse modification of these lands.

Critical habitat" is defined by the federal ESA as "(i) the specific areas within the geographical area occupied by the species…..on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species ….upon a determination by the Secretary that such areas are essential for the conservation of the species. [16 U.S.C. 1532(5)(A)].

Critical habitat receives protection under section 7 of the ESA through section 7(a)(2) which requires that each federal agency shall insure that any action it authorizes, funds, or carries out, is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat. Issuance of an incidental take permit pursuant to section 10(a)(1)(B) of the ESA on a HCP constitutes a federal action which requires consultation under section 7(a)(2). Prior to issuance of an incidental take permit to an applicant under Section 10 of the ESA, the Service must conduct an internal section 7 consultation to ensure that destruction or adverse modification to proposed or designated critical habitat will not occur as a result of implementing the proposed HCP, in addition to the requirement that the proposed HCP will not jeopardize species.

The Service will evaluate critical habitat utilizing the ESA statutory provisions in sections 3 and 7. The Service will evaluate the direct and indirect effects of implementation of the HCP on critical habitat, determine how the physical or biological features of critical habitat that are essential to the conservation of the species are likely to be affected, and, in turn, how that will influence the function and conservation role of the affected critical habitat. A conclusion of whether or not issuance of an incidental take permit will result in destruction or adverse modification of critical habitat will depend on whether the critical habitat would remain functional (or retain the ability for the physical and biological features to be functionally established) to serve the intended conservation role for the species with the implementation of the HCP.

No changes to the HCP/NCCP or EIS/EIR are required.

Response to Comment E-2

In response to the HCP/NCCP, the commenter suggests that the proposed HCP/NCCP does not provide adequate protection for California red-legged frog, California tiger salamander, or Alameda whipsnake. The commenter contends that the Plan does not adequately mitigate the loss of habitat essential to the recovery of these species. Commenter requests that the EIS/EIR identify if any critical habitat for California red-legged frog, California tiger salamander, or Alameda whipsnake is

designated or proposed to be designated within the Plan Area and requests that all critical habitat for these three species be removed from any development or distance and preserved.

Chapter 4 of the HCP and Chapter 4 of the EIS/EIR assess the impacts of covered activities on California-red-legged frog, California tiger salamander, and Alameda whipsnake. Based on implementation of the conservation strategy described in Chapter 5 of the HCP/NCCP and the conditions on development in Chapter 6 of the HCP/NCCP, the HCP/NCCP concludes that implementation will contribute to recovery, which is the standard for an NCCP. The EIS/EIR concludes that impacts to these three species can be mitigated to a less than significant level. This comment provides no evidence to counter the analysis in the HCP/NCCP nor that in the EIS/EIR as to why the HCP/NCCP will not contribute to recovery or why impacts are not adequately mitigated.

The Secretary of the USFWS has excluded critical habitat for California red-legged frog and California tiger salamander and proposed critical habitat for Alameda whipsnake based on the implementation of the HCP. USFWS conducted a 4(b)(2) analysis as required under the Act when it weighed the benefits of designation of critical habitat to the benefits of excluding critical habitat within the boundaries of the HCP. The Secretary of the USFWS concluded that the HCP provided more benefits than the designation and, therefore, the area was excluded from critical habitat.

No changes to the HCP/NCCP or EIS/EIR are required.

Response to Comment E-3

In response to the HCP/NCCP, the commenter has the same concerns as the Friends of the Swainson's Hawk that the mitigation program does not assure adequate funding.

See responses to comments K-1 and K-2.

No changes to the HCP/NCCP or EIS/EIR are required.

Response to Comment E-4

In response to the HCP/NCCP, the commenter states concern that the mitigation program will not generate sufficient funds to purchase the desired mitigation land at the costs estimate in the Plan.

See responses to comments K-1, K-2, and K-3.

No changes to the HCP/NCCP or EIS/EIR are required.

Response to Comment E-5

In response to the HCP/NCCP, the commenter expresses concern about the proposed Stay Ahead provision and recommends that developers should be required to purchase and preserve suitable habitat before any permits are issued that would allow destruction of habitat.

See responses to comments K-8.

No changes to the HCP/NCCP or EIS/EIR are required.

Response to Comment E-6

In response to the HCP/NCCP and the EIS/EIR, the commenter asserts that the alternatives analysis is inadequate and specious because it assumes that urban development must proceed as proposed and assumes that impacts of urban development to covered species is inevitable and necessary. The commenter suggests that the project has not considered alternatives such as housing infill projects and avoidance of suitable habitat for listed species to reduce take or avoid take.

One of the objectives of the HCP/NCCP is "enable the County and the Cities of Brentwood, Clayton, Oakley, and Pittsburg to reasonably and efficiently implement their respective general and specific plans" as described in Chapter 1 of the EIS/EIR. This is a fundamental objective of the HCPA. As such, pursuant to NEPA and CEQA requirements, the alternatives analysis is focused on alternatives that meet this fundamental objective. While the commenter may advocate for a pattern of development different than planned for in the adopted general and specific plans, neither NEPA or CEQA require consideration of alternatives that do not meet a fundamental objective of the project overall.

In Chapter 2 of the EIS/EIR, a no-take alternative was considered based on the consideration in Chapter 11 of the HCP/NCCP. As stated in the EIS/EIR and the HCP/NCCP, such no-take alternatives were rejected because they would not allow reasonable development consistent with the adopted plans of the participating jurisdictions or would result in biologically inferior outcomes.

While an alternative that avoids all suitable habitat of covered species was not explicitly considered, such an absolute alternative would clearly not meet the objective of providing for development in accordance with adopted plans. An absolute prohibition on development within suitable habitat would also stop necessary infrastructure improvements to serve existing and future development. Finally, as impacts of covered activities to covered species can be mitigated through HCP/NCCP implementation to a less than significant level, the commenter provides no rationale why such an alternative is actually required to avoid significant impacts of the proposed project.

In Chapter 2 of the EIS/EIR, a modified urban growth model ("smart growth or similar alternative growth models") was considered for analysis that would focus on changing land use policy that may be favored by the commenter. This alternative was rejected from further consideration as it is considered infeasible based on financial and legal reasons, most critically that land use policy is not within the USFWS and DFG jurisdiction as the potential approvers of the take permits. Further, development of an alternative growth model that is different from the current adopted plans is speculative due to the legislative and political nature of the issues involved in changing land use direction wholesale and NEPA and CEQA do not require an alternatives analysis to engage in speculation.

Alternative 3: Reduced Development Area was analyzed at an equal level of detail in the EIS/EIR. This alternative would provide for a reduced level of take due to a reduced permit area as described on p. 2-34 to 2-36 in the Draft EIS/EIR. While this alternative is not a "no-take" alternative, it would result in substantially less impacts on land cover, covered species, and natural communities compared to Alternatives 1 and 2.

The proposed project does not preclude the provision of housing infill projects if adopted by the respective jurisdictions. In addition, in the long-term, the HCP/NCCP does incorporate a number "smart-growth" provisions including preserving open space and establishing a development fee program that apportions costs according to impacts on species and would charge no fee and require

no mitigation expense from redevelopment and infill projects that do not disturb previously undisturbed ground.

For these reasons and those cited in Chapter 2 of the EIS/EIR and Chapter 11 of the HCP/NCCP, the alternatives consideration in both the HCP/NCCP and the EIS/EIR meets the reasonable range requirements of NEPA and CEQA and thus is neither inadequate nor specious as commenter asserts.

No changes to the HCP/NCCP or EIS/EIR are required.

Response to Comment E-7

In response to the HCP/NCCP, the commenter states that the HCP/NCCP allows unacceptable level of take and habitat destruction for Alameda whipsnake, San Joaquin kit fox, California red-legged frog, and California tiger salamander and does not adequately protect upland habitat or maintain corridors essential for movement and genetic interchange of these species. The commenter also states that the Plan allows urbanization of habitat identified as essential for the recovery of these species in recovery plans published by the USFWS.

Each one of these species is discussed below.

Alameda Whipsnake

As described in Table ES-3 and Chapter 4 of the HCP/NCCP, the estimated level of impact to Alameda whipsnake from all covered activities is up to 29 acres of core and perimeter habitat (2 acres under the initial Urban Development Area [UDA]) and up to 341 acres of movement habitat (117 acres under the initial UDA). These impact estimates represent 2% or less of the available such habitat in the inventory area. This level of estimated impact is among the lowest of any covered species in the Plan.

Despite these very low impacts, the Plan has requirements to protect at least 550 acres of chaparral/scrub land cover types (see Table 5-7), which provides most of the core habitat for Alameda whipsnake. This will result in an estimated protection of at least 1,690 acre of core and perimeter habitat for this species (53% of available and unprotected habitat) and at least 10,564 acres of movement habitat (51%). As described in Chapter 5, the Implementing Entity will acquire 90% of the remaining chaparral in Subzones 2a, 2b, and 2c (i.e., 90% of 135 acres) to protect patches of chaparral that serve as modeled core habitat for Alameda whipsnake and provide important assumed linkages for whipsnake populations between Mount Diablo State Park and Black Diamond Mines Regional Park. This requirement is specifically designed to address the movement needs of this species and fulfill one of the recovery goals in the species' draft recovery plan to connect Mount Diablo State Park with Black Diamond Mines Regional Preserve (see Figure 19 in U.S. Fish and Wildlife Service 2002b).

As described in Chapter 5, the HCP/NCCP also requires substantial chaparral and core habitat for Alameda whipsnake be preserved in Subzones 4a and 4h. Preservation in this area will increase the width of protection of the existing movement route from the Los Vaqueros Watershed through Morgan Territory Regional Preserve to Mount Diablo State Park. This is also a goal of the USFWS draft recovery plan for the species (see Figure 19 in U.S. Fish and Wildlife Service 2002b).

Based on these facts, the estimated impacts to core and movement habitat for Alameda whipsnake that would occur under the Plan are reasonable and the conservation requirements for the species for preservation of breeding, foraging, and movement habitat are substantial and more than adequately mitigate for the impacts.

San Joaquin Kit Fox

As stated in Table ES-3 and Chapter 4, impacts to San Joaquin kit fox suitable core habitat are estimated at up to 4,576 acres in the maximum UDA and 2,530 acres in the initial UDA. These impacts represent a loss of 11% and 7% of available core habitat in the inventory area, respectively. The southward expansion of Pittsburg and Brentwood would affect small portions of core habitat for kit fox, while growth of Byron and infill in Brentwood would affect small portions of habitat defined as low use in the HCP/NCCP model. The expansion of the Byron Airport would affect core habitat for this species. The westward expansion of Pittsburg would affect areas modeled as core habitat for kit fox, but this area may be outside the species' range. Impacts to San Joaquin kit fox habitat generally occur in areas of lower-quality habitat at the fringe of existing urban development (see Figure 4-1) where indirect impacts to this species from human activities are more severe.

The HCP/NCCP calls for preservation of an estimated 17,164 acres (43%) of core habitat under the initial UDA and an estimated 20,465 acres (51%) of core habitat under the maximum UDA. As described in Chapter 5, the Plan also calls for preservation of essential movement routes for San Joaquin kit fox to ensure that known occurrences in Black Diamond Mines Regional Preserve at the northern edge of the species' range remain connected to populations elsewhere in the inventory area and to Alameda-Contra Costa County line. This important regional linkage will be provided by connecting existing large protected areas. Annual grassland within preserves will be managed to enhance small-mammal populations (a prey base for kit fox; Conservation Measure 2.5) and to enhance the native plant component of this vegetation community (Conservation Measure 2.4).

The land acquisition strategy for San Joaquin kit fox is consistent with, and may exceed, the recovery targets for this species in this area. In Table 7 of the *Recovery Plan for Upland Species of the San Joaquin Valley* (U.S. Fish and Wildlife Service 1998), Recovery Task 2.1.19 is identified as land preservation in the northwest portion of the species' range in Alameda and Contra Costa counties. Details are not provided on how much land is to be protected and where, and this task is identified as a Priority 2 task (out of 3). The HCP/NCCP has done extensive analysis of suitable habitat and potential movement routes in the inventory area (see the habitat model in Appendix D and Figure 5-5) to determine the most important areas for preservation in the inventory area. The HCP/NCCP has aggressive conservation requirements for land acquisition to meet the strong biological goals and objectives for this species.

Based on these facts, the estimated impacts to core habitat for San Joaquin kit fox that would occur under the Plan are reasonable and the conservation requirements for the species for preservation of breeding, foraging, and movement habitat are substantial and more than adequately mitigate for the impacts.

California Red-Legged Frog

As stated in Table ES-3 and Chapter 4, impacts to California red-legged frog (CRLF) are estimated at up to 3 acres (3%) of non-stream breeding habitat, 0.6 miles (<1%) of stream breeding habitat, and 7,785 acres (11%) of movement habitat. Impacts under the initial UDA would be lower. All impacts would occur in low-quality habitat that is either already fragmented within urban areas or at the end

of urban development where indirect impacts to this species are more severe from human activities and pets (see Figure 4-3).

The conservation strategy calls for preservation of ponds, seasonal wetlands, perennial wetlands, and upland habitats that would result in an estimated 36 acres (38%) of non-stream breeding habitat preserved 98 miles (45%) of stream breeding habitat preserved, 29,467 acres (42%) of upland habitat preserved, 33 acres of ponds restored, and 85 acres of perennial wetlands restored. The conservation strategy also includes provisions to protect a certain density of ponds in areas with high densities of ponds to preserve core areas for this species. Ponds will be designed to support the life-history requirements of CRLF, where appropriate (Conservation Measures 2.2 and 2.3). Stream restoration will also enhance habitat for CRLF, where appropriate.

Conservation measures in the HCP/NCCP were designed to help implement the *Recovery Plan for California Red-Legged Frog* (U.S. Fish and Wildlife Service 2002). For example, the largest core recovery unit for the species identified in the recovery plan is Unit 16, East San Francisco Bay. All of the suitable breeding and upland habitat to be conserved by the HCP/NCCP will occur within the northern portion of this recovery unit. The HCP/NCCP will also help implement several tasks identified in the recovery plan, including:

- Purchase conservation easements or parcels from willing sellers where acquisitions may protect existing populations, allow for expansion of metapopulations, and increase the quantity of protected suitable habitat within the range of the species (page 61 of recovery plan).
- Control/eliminate non-native species/predators (plants, vertebrates, invertebrates) using methods that are determined to be the most effective (page 65 of recovery plan).
- Reduce the detrimental effects of livestock grazing and increase incidental benefits associated with livestock grazing on public and private lands (page 67 of recovery plan).
- Develop site-specific guidelines for recreational activities to reduce or eliminate impacts to the California red-legged frog where these activities pose an on-going threat to habitat quality (page 69 of recovery plan).
- Work with county planners and local water districts to minimize the effects of urban and suburban development and associated activities by developing regional plans and/or habitat conservation plans (page 76 of recovery plan).

Based on these facts, the estimated impacts to breeding and movement habitat for California red-legged frog that would occur under the Plan are reasonable and the conservation requirements for the species for preservation of breeding and movement habitat more than adequately mitigate for the impacts.

California Tiger Salamander

As shown in Table ES-3 and Chapter 4, impacts to California tiger salamander breeding habitat are estimated to be 50 acres (19%) under the initial UDA and 68 acres (26%) under the maximum UDA. Impacts to movement and aestivation habitat are estimated to be 3,457 acres (6%) and 5,571 (9%) under the initial and maximum UDA, respectively. As shown in the habitat model for this species in Appendix D, the majority of impacts to both breeding and movement habitat will occur in areas already fragmented and/or subject to serious degradation due to their proximity to existing urban development and human activity.

Under the Plan, an estimated 37-43% of breeding habitat and 40-51% of migration/aestivation habitat outside parks and open space will be conserved, breeding habitat will be created and restored, and migration/aestivation habitat will be enhanced. The Preserve System will protect 96-111 acres of breeding habitat and 24,047-28,751 acres of migration/aestivation habitat (Table 5-13 and Conservation Measure 1.1). A network of core preserves will protect large blocks of aestivation/migration habitat. New linkages will be created in blocks of suitable habitat to facilitate dispersal and colonization throughout the inventory area and movement between breeding sites. Because California tiger salamanders (CTS) require habitat complexes that include both suitable breeding and upland habitat, areas preserved to achieve the biological goals and objectives for CTS will include both habitat elements. In addition, to compensate for loss of aquatic habitats (much of which is likely suitable habitat for CTS), aquatic habitats will be acquired in kind (ratios in Table 5-5). An estimated 32-33 acres of pond habitat will be created to both mitigate for impacts and to contribute to recovery as well as 84-85 acres of perennial wetland complex (Tables 5-16 and 5-17). Ponds will be designed to support the life-history requirements CTS, where appropriate (Conservation Measures 2.2 and 2.3).

There is no recovery plan for California tiger salamander so that conservation requirements of the HCP/NCCP cannot be compared with USFWS recovery goals.

Based on these facts, the estimated impacts to breeding and movement habitat for California tiger salamander that would occur under the Plan are reasonable and the conservation requirements for the species for preservation of breeding and movement habitat more than adequately mitigate for the impacts.

No changes to the HCP/NCCP or EIS/EIR are required.

Response to Comment E-8

In response to the HCP/NCCP, the commenter states that the western pond turtle is not adequately protected by the Plan. The commenter further states that the Plan's broad characterization of habitat provides little assurance that the microhabitat features important to the pond turtle will be protected and that management activities such as restoration of aquatic habitat and establishing road undercrossings are not included as Plan objectives.

The HCP/NCCP will preserve land cover types that will result in an estimated 675-873 acres (21-27%) of core non-stream habitat and 6-7 miles (18-21%) of core stream habitat outside parks and open space conserved. In addition, breeding habitat will be created or restored, and basking habitat will be enhanced. A network of core preserves will protect 1,715-1,956 acres of upland breeding and movement habitat for western pond turtle. New preserves will be established adjacent to existing protected land to maintain contiguous wetland-upland complexes to preserve the microhabitat needs of this species (Conservation Measure 1.1).

Contrary to the commenter's statement, the HCP/NCCP does include provisions for habitat restoration. An estimated 32-33 acres of pond habitat will be created (Tables 5-16 and 5-17) in part to support habitat for western pond turtle. Approximately 0.6-0.8 miles of stream habitat will be restored, also in part to support this species. Additionally, artificial basking substrate and woody debris will be installed in some ponds to increase basking sites for pond turtles (Conservation Measure 3.7).

In addition, the Plan includes provisions for road undercrossings for selected covered rural road projects. Conservation Measure 1.14 in Chapter 6 describes design measure required for some rural roads (see Table 6-6 for roads required to follow these measures).

Based on these facts, the conservation plan is expected to provide significant benefits to western pond turtle and therefore adequately conserves this species.

No changes to the HCP/NCCP or EIS/EIR are required.

Response to Comment E-9

In response to the HCP/NCCP and the EIS/EIR, the commenter states that the tricolored blackbird is not adequately protected in the proposed Plan and that EIS/EIR should include information about the status and threats to the species from a recent listing petition submitted by the Center for Biological Diversity (CBD).

Regarding the protection proposed in the HCP/NCCP, Table ES-3 and Chapter 5 describe the conservation for tricolored blackbird proposed. The Preserve System will protect an estimated 126-164 acres (14-19%) of modeled core habitat, 16,474-20,138 acres of primary foraging habitat (27-33%), and 242-365 acres of secondary foraging habitat within the initial or maximum UDA, respectively (see Table 5-13 and Conservation Measure 1.1). The Preserve System will also protect at least seven of the 13 ponds in Subzone 2c, all of which provide potential breeding habitat for tricolored blackbird. Wetland and pond creation and restoration will provide additional habitat for tricolored blackbird. An estimated 84-85 acres of perennial wetland complexes will be created or restored as well as an estimated 32-33 acres of pond habitat (Tables 5-16 and 5-17). Conservation easements will be acquired on 250-400 acres of cropland or pasture in Acquisition Analysis Zone 6 under each development area. Conservation easements will require landowners to enhance the value of agricultural lands for tricolored blackbird and other covered species (Conservation Measures 1.3 and 2.11). The HCPA and the Wildlife Agencies believe that the conservation measures proposed in the HCP/NCCP will adequately conserve the species the in the inventory area.

Regarding the information in the CBD petition to list the tricolored blackbird, all of the relevant information in this petition has been included in the species account for tricolored blackbird found in Appendix D of the HCP/NCCP. This species account was reviewed by Dr. Ted Beedy at Jones & Stokes, a leading authority on the ecology, distribution, and conservation of tricolored blackbird in California. Indeed, the listing petition appears to use one of the figures from the HCP/NCCP species account (Figure 1 in the listing petition). This amount of detail is not appropriate in the EIS/EIS, which is why the information in the HCP/NCCP is incorporated by reference in Chapter 2 of the EIS/EIR.

No changes to the HCP/NCCP or EIS/EIR are required.

Response to Comment E-10

In response to the HCP/NCCP, the commenter states that the Swainson's hawk is not adequately protected under the Plan and references comments made by the Friends of the Swainson's Hawk and the Swainson's Hawk Technical Advisory Committee.

Changes to HCP/NCCP

See responses to comments K-1 to K-22 and P-1 to P-4.

Response to Comment E-11 and ES-12

In response to the HCP/NCCP, the commenter states that the western burrowing owl is not adequately conserved by the Plan and that the Plan inappropriately promotes passive relocation of owls away from currently occupied nesting areas.

The HCP/NCCP Preserve System will protect 16,675-19,844 acres (38-45%) of breeding and foraging habitat and 345-703 acres of low-use habitat under the initial and maximum UDA, respectively (Table 5-13). A network of preserves will protect large blocks of grassland habitat. New linkages will be created suitable for dispersal and colonization throughout the Preserve System and to existing parks and open space (Conservation Measure 1.1). To attract and retain western burrowing owl, artificial burrows and perches will be installed, where appropriate (Conservation Measures 3.4 and 3.5).

As described in Chapter 6, passive relocation of owls is required as a measure to avoid direct impacts on individual owls, not a primary conservation measure to protect the species. This technique is commonly used throughout California and recommended by the California Department of Fish and Game in their October 1995 mitigation guidelines (see http://www.dfg.ca.gov/hcpb/species/stds_gdl/bird_sg/burowlmit.pdf). Because this measure is not a primary conservation tool, it was determined that close monitoring of owls relocated was not necessary. All covered activities are within the "short distance" (less than 5 miles) from existing protected lands or the HCP/NCCP Preserve System, so it is likely that owls can disperse to these protected sites.

No changes to the HCP/NCCP or EIS/EIR are required.

Response to Comment E-13

In response to the HCP/NCCP, the commenter states that fragmentation of suitable habitat will adversely affect western burrowing owl and the loss of agricultural lands contemplated in the Plan would significantly impact the species.

The conservation strategy in the HCP/NCCP calls for protection of up to 30,000 acres of land in continuous blocks to create new core preserves and link existing protected areas throughout the inventory area. As described in response to comment ES-11 and ES-12, the majority of this new Preserve System will provide high-quality suitable habitat for western burrowing owl because of its natural state (i.e., grassland and oak woodland) and enhanced habitat value (e.g., management to increase the prey base and availability of burrows for burrowing owls). Creation of the Preserve System will not lead to increased fragmentation of protected areas—it will actually do the opposite by linking currently disconnected protected areas.

It is true that agricultural lands in the eastern portion of the inventory area will be lost to covered activities, primarily in Brentwood and Oakley. As shown in the habitat model for western burrowing owl in Appendix D of the HCP/NCCP, there are extensive areas of suitable habitat for the species within the Urban Limit Line near these cities. However, all of this habitat is identified as "low-use habitat" because of its lower suitability for the species relative to grassland and other land cover

types. Therefore, the vast majority of impacts to burrowing owl from loss and fragmentation of habitat as a result of covered activities will occur on low-use and low-quality habitat. This does not constitute a significant loss of habitat for the species in the inventory area given the availability of high-quality habitat in protected areas (25,505 acres) and the high-quality habitat that will be protected in the HCP/NCCP Preserve System (up to 19,844 acres).

No changes to the HCP/NCCP or EIS/EIR are required.