California Native Plant Society

East Bay Chapter
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December 1, 2005

John Kopchik
East Contra Costa County Habitat Conservation Plan Association
651 Pine Street, 4th Floor
Martinez, CA 94553

RE: Draft East Contra Costa County HCP/NCCP and Environmental Impact Report

Dear Mr. Kopchik:

The East Bay Chapter of the California Native Plant Society (CNPS) appreciates the opportunity to comment on the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and Draft Environmental Impact Report. CNPS is a non-profit organization of more than 10,000 laypersons and professional botanists organized into 32 chapters throughout California. The mission of CNPS is to increase the understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education, and conservation. The following are comments of the East Bay Chapter of CNPS on the *Draft East Contra Costa County HCP/NCCP and Environmental Impact Report*:

While the plan is an ambitious one, CNPS is in favor of accepting the HCP over the alternatives outlined in the EIR. We look forward to seeing the plan implemented to conserve examples, hopefully the best examples, of the plant communities as habitats. CNPS is heartened to see the Stay Ahead provision as that is the key to the plan actually conserving anything. We hope that the funds will become available to enact the plan as outlined and refined by more specific habitats. Overall, our specific comments offer refinements to the HCP and not opposition to the Plan.

Chapter 3: Physical and Biological Resources

3.2.2 Land Cover Mapping Pg. 3-2:

Regardless if land-cover types are 'the most widely used units", they are inadequate for many of the applications in HCPs. Generalization leads to inconsistent mapping and labeling of polygons because many types are not defined, or could be interpreted more than one way. Repeatable and defensible techniques are needed and are especially important when monitoring vegetation on a landscape. More detailed community data and height and cover data are important for determining critical habitat for sensitive species, and the generalized land cover mapping can lead to overestimation of potential habitat. The generalized land cover types are inadequate for providing a coarse filter that would help protect the full range of both common and rare species in the Plan Area. C-1

Mapping Procedures Pg. 3-3:

A 10-acre minimum mapping unit is very coarse and will lead to errors in estimating acreages of land cover types and impacts. In addition, the mapping methodology for the Plan Area does not provide any statistical measure of error for labeling polygons that can be accounted for in estimates of habitat and measures of impact. CalVeg (USDA) data uses a finer mapping scale and at the least, should be considered as an alternative data source for estimating acreages and impacts. A dichotomous key indicating how labeling decisions were made would improve repeatability of mapping. C-2

3.3.2 Existing Land-Cover Types
Grassland Pg 3-8 C-3
Disking probably occurred for dry land farming rather than to improve forage.

Native Grassland
Pg. 3-9 Please include scientific names of plant communities. Native grassland alliances listed by CNDDB (CDFG 2003) but not listed in the HCP include Serpentine bunchgrass. The CNDDB recognizes "wildrye grassland" as two alliances which should be listed separately: 1) blue wildrye grassland (*Elymus glaucus*), and 2) creeping ryegrass grassland (*Leymus triticoides*). Both alliances occur in the inventory area and additional alliances may be recognized in the future. The diversity and importance of native grassland forbs in native grasslands and the Plan Area deserves attention. C-4
Pg. 3-10 Long-term data suggests trends in native perennial grass abundance independent of grazing management. Two data points, especially without exclosures, are inadequate to infer effects of management.

Alkali grassland Pg. 3-10
Alkali sacaton is not known to occur in the inventory but is known nearby. It has potential to occur in the inventory area. The creeping wildrye alliance can occur in alkali habitats. Alkali grassland also occurs in the Sand Creek area and the Los Vaqueros watershed. C-5

Chaparral and Scrub Pg 3-11
Coastal sage scrub is a poor reference for the soft chaparral in the Plan Area. It should be referred to as Diablan Sage Scrub, sage scrub or interior sage scrub rather than coastal sage scrub. It is ambiguous as to whether "small (less than 10 acre) stands of scattered trees" were mapped as chaparral and scrub when they were imbedded or adjacent to chaparral and scrub, or in general. It is unclear how patches of coastal sage scrub greater than 10 acres were mapped in the Plan Area. C-6

California buckwheat (*Eriogonum fasiculatum*) is unlikely to occur in the project area except where planted by CalTrans, or perhaps as a waif. The northern limit of its' natural distribution is in Alameda County, a few questionably native individuals occur in Contra Costa County. Bush monkeyflower (*Mimululs aurantiacus*) is a far more conspicuous component of chaparral and scrub communities.

Oak Woodland Pg. 3-13
Lumping of all oak woodland and mixed evergreen forests is unfortunate as these communities have important ecological and compositional differences, and different habitat C-7

values. Light, substrate, disturbance history, slope, and aspect are probably important factors in determining structure and composition of oak woodland (and mixed evergreen forest pg. 3-14) understory. C-7 (Cont.)

Mixed Evergreen Forest Pp. 3:13-14

Tan oak (*Lithocarpus densiflorus*) is not known from anywhere in the East Bay. *Quercus agrifolia, Q. wislizenii* and *Q. chrysolepis* can be components of mixed evergreen forests in the Plan Area, not just in the transition zone with oak woodlands. The distribution of this community in the Plan Area is correlated in part with aspect and slope, not just elevation. Wildlife in mixed evergreen forests lacking species of *Quercus* is likely to be different from oak woodlands in that species dependent on acorns would be lacking or uncommon. C-8

Riparian Woodland/Scrub Pg. 3-14

For addressing impacts and regulatory purposes (e.g., Conservation Measure 1.1, pg. 6-11), it might be beneficial to provide various possible criteria for defining riparian vegetation and zones, such as indicator species, vegetation zonation in relation to stream, and some minimum zone. A single criteria is not recommended as indicator species may be absent despite a distinctive vegetation zone associated with a given creek or stream. C-9

3.3.7. Covered Species

(The following applies to both section 3.3.7 – of the HCP/NCCP (subheadings species evaluation) and section 3.2.5 of the EIS/EIR)

CNPS is discouraged that the draft did not use Dianne Lake's publication of *Rare, Unusual and Significant Plants of Alameda and Contra Costa Counties*. The publication was not included in the description of sources on page 3-38, nor was reference to it made elsewhere in the Plan.

Further, location information not contained in the California Natural Diversity Database nor in local herbaria may be contained in this reference and could change the coverage recommendations as listed in Table 3-7.

Although there is one reference to herbaria accession data contained in the UC/Jepson Herbaria's SMASCH database http://www.mip.berkeley.edu/www_apps/smasch/smasch_coll_evt.html for *Navarretia nigelliformis* ssp. *nigelliformis* why were the other potentially occurring special status plant species evaluated for coverage recommendations not cross-referenced with the Smasch database? C-10

Why was the Sacramento District of the U.S. Fish and Wildlife Services' list of Plant Species of Concern http://www.fws.gov/sacramento/es/spp_lists/plant_sp_concern.cfm not included in source information section or covered species locations?

Why was Dianne Lake, the East Bay's (Alameda and Contra Costa Counties) local expert on both common and rare plant occurrences, not consulted and included in the source information and/or personal communication references?

CNPS is also concerned that when the HCP reviewed the rare plants to be included, species were rejected that had no records in the area or that had old records and were now presumed extirpated. The recent discovery of the Mount Diablo buckwheat, or *Eriogonum truncatum,* is evidence as to how plants show up that had not been reported for years in a place, sometimes just because no one had looked in exactly the right place before. CNPS is also always finding plants in places where they had not previously been reported, again sometimes just because no one had looked there before or had not looked at the right time of year. There are many areas in the HCP area that have not been well-explored botanically and it is not known whether rare plants are on site without looking first. (Specific issues regarding this are address in comments on table 3.7 below.) C-10 (Cont.)

HCP 3.3.7: Definition of a Special Status Species and 3.2.5 of the EIS/EIR

Why is CEQA guideline 15125(a), which requires that impacts to "resources that are rare or unique to that region" be evaluated, not included in the list of Special-Status plant species definitions? If CNPS List 3 and 4 species are included in that definition then CEQA Guideline 15125(a) should also be address since it would also cover species of local significance. Here in the East Bay (Alameda and Contra Costa Counties) Dianne Lake's publication of *Rare, Unusual and Significant Plants of Alameda and Contra Costa Counties, Seventh Edition* contains numerous species considered locally rare. Particularly her A-1 and A-2 list species would be covered by CEQA guideline 15125(a). C-11

HCP 3.3.7: Covered Species Locations

In the last paragraph of the Covered Species Locations in Section 3.3.7 it is stated that "*The majority of the records come from the CNDDB. These records represent the best available statewide data but are limited in their use for conservation planning. ... the database is biased geographically towards areas where surveys have been conducted or survey efforts are greater (many areas have not been surveyed at all). Plants typically receive less survey effort than wildlife*." With these limitations in mind why were other locally valuable references such as *Rare, Unusual and Significant Plants of Alameda and Contra Costa Counties, Seventh Edition* by Dianne Lake, 2004 and the UC/Jepson Herbaria's SMASCH database http://www.mip.berkeley.edu/www_apps/smasch/smasch_coll_evt.html not included in the references regarding species locations? C-12

Chapter 4: Impact Assessment and Levels of Take

4.2.5 Methods and Assumptions for Assessing the Impact of Covered Activities

The estimate of footprint of temporary impacts outside the ULL may be reasonable, but aren't well documented. Will these be subject to monitoring/adaptive management described in Ch. 7? C-13

4.3 Effects on Natural Communities, Wetlands, and Streams Pg. 4-11

The discussion of impacts to natural communities and wetlands lacks a discussion of sensitive natural communities within the Land Cover Types that will be impacted. Although quantifying these impacts is difficult, a qualitative discussion would be helpful. For example, the impacts to "Non-native Grasslands" could include "native grassland" communities that were listed on page 3.9 and described as "rare". This is a potential impact that could be called out in Section 4.3 to provide a more accurate description of potential impacts. Section C-14

5 includes protection of rare communities in the Preserve Design, but will rare communities that are impacted require compensatory mitigation?

Potential impacts to sensitive natural communities should be avoided as much as possible because their distribution is limited in the Inventory Area. Protecting sensitive natural communities is consistent with the HCP's conservation objective that "Conserves, restores, and provides for the management of representative natural and semi-natural landscapes." and the objective that "Incorporates a range of environmental gradients and high habitat diversity to provide for shifting species distributions due to changing circumstances."

Minimum impacts to undifferentiated wetlands, seasonal wetlands, and alkali wetlands are 25, 20 and 15% respectively (Table 4.2). Because alkali and other wetlands are rare in the Plan Area and statewide, are important habitat for several covered species and biodiversity found only in these habitats, caps should be added to reduce these losses.

C-14 (Cont.)

Due to the coarse scale of mapping of land cover types, minimum and maximum acreages of natural communities impacted in the Plan Area are likely to overestimate impacts of certain communities and underestimate others. Additional inaccuracy due to mapping errors and lack of an accuracy assessment to determine quantitatively the mapping error are likely to result in additional problems.

The general classification used to determine acreages of protected habitat and projected impacted habitats is disconcerting. Protected areas or projected impact area may be biased towards one or more of the natural community types lumped into the land cover units. For example, most of the "oak woodland" in the protected areas may be mixed evergreen forest, but most of the projected impacted "oak woodland" may be valley oak or blue oak woodland.

Section 4.4.6 Plants

In assessing potential impacts to known occurrences of covered plants, having additional information about the occurrences would be useful in determining the significance of the potential impact (Table 4-6). Page 4-19 states that known occurrences of covered plants are assumed to be extant, except for occurrences within large urban areas, but some of the known occurrences listed in Table 4-6 could be extirpated. The number of known occurrences compared to the number of potentially impacted occurrences is therefore potentially inaccurate, which makes it difficult to assess the relative number of occurrences that are impacted and not impacted. It is also therefore possible that any one of the impacted occurrences is the last remaining extant occurrence in the Inventory Area. For example, the species profile in Appendix D states that the seven occurrences of round-leaved filaree (*Erodium macrophyllum*) in the Inventory Area are mostly historic and cannot be located precisely; therefore, any extant occurrences that are impacted in the Inventory Area could be one of the only extant occurrences in the Inventory Area. In addition, some species' occurrences could be more important to preserve than other occurrences because of its population size, geographic location at the edge of the species' range, genetic uniqueness, and/or unique microhabitat. Although specific information about occurrences is often limited, any information available that could put these potential impacts into a more accurate perspective is recommended for inclusion in the text.

C-15

The list of potential indirect impacts to covered plants on page 4-20 should also include changes in hydrology (drainage patterns) in the Inventory Area and in adjacent areas that affect a plant's suitable habitat (soil alkalinity or hydroperiod) and which subsequently could affect the species' population trend. C-15 (Cont.)

4.5.2 Contra Costa Gold Fields

Although only 1.1 acres of Critical Habitat is expected to be impacted, Contra Costa Goldfields could occur in alkali or seasonal wetlands in the Plan Area, of which 20 and 15% are expected to be impacted. Critical habitat was designated using historic localities and potential habitat in the vicinity of historic locations rather than potential habitat throughout its range. Potential impact should be considered outside the context of designated Critical Habitat. C-16

Chapter 5: Conservation Strategy

The conservation strategy takes into account limitations of baseline data available for the plan. The plan should be flexible so that better vegetation and species data can be incorporated in the future. Better vegetation data would include alliance or association level mapping.

Natural Community-level Goals for all habitat types should include a measure to include the full range of community diversity, even if only at the alliance level. This is a consideration in the Preserve Design Principles but should be a goal. C-17

Species-level Goals in general should include more plant occurrences. The numbers appear to be based on the number of known occurrences (as suggested in the Land Acquisition Requirements, pp. 5:29-43), however many acres of unsurveyed land have the potential to support additional populations of these species.

Section 5.1 Summary of Conservation Strategy

Under the bulleted paragraph on page 5-2, it states that "The heart of the conservation strategy is a system of new preserves linked to existing protected lands to form a network of protected areas…" How likely is it that the certain land will be available for fee title or conservation easements to create the new preserves and to acquire key properties that will be necessary for linking protected lands? Please include a discussion of this in the text. C-18

Section 5.2.2 Biological Goals and Objectives

Grassland/Natural Community-level Goals Pg. 5-6

A goal should be added to preserve native biological diversity, including all known and undescribed alliance types, and as many associations as possible in grasslands of the Plan Area. C-19

Oak Woodland/Natural Community-level Goals Pg. 5-7

CNPS requests that an additional goal be added to protect all of the oak woodland and evergreen forest alliances and as many associations as possible. C-20

Oak Woodland/Species-level Goals Pg. 5-7

Populations of showy madia (*Madia radiate)* should be protected in grassland and oak woodland habitats. It should be noted that this species is more often found in open habitats than oak woodland. In addition, protection goals for Mt. Diablo fairy-lantern (*Calochortus pulchellus)* should be included. C-21

Chaparral/Scrub Natural Community-level Goals Pg. 5-7

CNPS recommends that goals should include: 1) protection of all chaparral and scrub alliances and as many associations as possible in the Plan Area and 2) maintain a disturbance regime that maintains biological diversity associated with this cover type. C-22

Chaparral/Scrub Species-level Goals Pg. 5-7

A goal should be added to preserve native biological diversity, including all known and undescribed alliance types, and as many associations as possible in chaparral communities of the Plan Area. C-23

Habitat Enhancement, Restoration, and Creation Pg 5-19

The importance of protecting and using reference stands (intact, high quality examples of community or ecosystem types to be used as an indication of enhancement, restoration or creation outcome) should be protected studies and utilized. Otherwise, if generic conceptions of community types based on stands not in the region are used, some of the unique values of the region could be lost. C-24

Habitat Enhancement Pg. 5-20

It is good that other measures for success of habitat enhancement will be used for communities inherently low in species richness, cover and productivity. The alternative measure should be an increase in the relative cover of native species to indicate an increase in the percentage of cover that is native rather than an increase in cover of native species. A decrease in non-native species cover would also be an appropriate measurement. It should also be noted that in some cases, soil compaction is beneficial to ponding, so perhaps the measure should be a decrease in inappropriate disturbance. C-25

Mitigation Plans for restoration and enhancement projects often specify that local sources of seeds and cutting should be used in the restoration/enhancement project, but in reality non-local sources are often used because of the lack of availability of local material or costs. To prevent genetic contamination at the restoration/enhancement sites, it is very important to plan these projects in advance to provide sufficient time to collect local seeds/cuttings to contract grow.

5.3 Conservation Measures

5.3.1 Landscape-Level Conservation Measures

Land Acquisition Requirements for Wetlands, Ponds, Streams, and Riparian Woodland/Scrub Pg 5-26 C-26

We greatly appreciate that wetlands and streams will be classified at the association or alliance level rather than single land-cover type, and the protection of adequate upland

habitat and buffers is part of the conservation strategy. This should be done for all community types. C-26 (Cont.)

Vegetation Management Pg. 5-57
Establishing buffers for fuel load reduction must be part of the preserve design process and buffer areas cannot be subtracted from the protected acreage. Buffers must be an additional acreage. C-27

Fire Management Pg. 5-59
Fire is a natural component of the East Bay and burning should be allowed periodically or prescribed. However, it should also be recognized that due to increased ignition opportunities (e.g., cars, cigarettes, camp fires and arson) the fire frequency in the East Bay under fire suppression is probably similar than it would be without humans. Fire effects should be monitored in preserves. Potentially vulnerable vegetation types should be considered in prescribed and let burn decisions. C-28

5.3.2 Natural Community-Level Conservation Measures
Conservation Measure 2.1 Pg. 5-70
We applaud the higher restoration criteria for land-cover types that are difficult to restore or create, but we recommend a ratio of 3:1 or higher. C-29

Conservation Measure 2.4 Manage Grassland

- **Pg. 5-80** Classification of the grassland to the association level rather than the alliance level is recommended to increase conservation of additional grassland biodiversity beyond the dominant species. C-30

- **Pg. 5-81** Meyer and Schiffman (1999) did not suggest that mulch benefits native forbs. Some treatments reduced both mulch and cover of native forbs as compared to the untreated plots, but some spring burning reduced mulch more than any other treatment and had the greatest benefit for native forbs. The appropriate conclusion is that treatment, rather than mulch reduction alone, can influence forb abundance. C-31

- **Pp. 5:81-82** A much more rigorous consideration of the effects of fire and grazing are needed to determine appropriate management regimes and techniques to be tested. C-32

Conservation Measure 2.6 Manage Oak woodland and Oak Savannah
Sudden Oak Death pg. 5-88 While SOD has not been reported in the Plan Area and the climate may not be appropriate to make it a threat, other species of *Phyptophthora*, could threaten oak woodlands and other plants in the Plan Area. For example, *P. cinnamomi* is devastating stands of *Arctostaphylos myrtifolia* in the Sierran foothills. C-33

Conservation Measure 2.8 Manage Chaparral/Scrub
It is important to note that different associations of chaparral and scrub types are likely to respond differently to fire. Many plant species respond to smoke and heat associated with burning rather than to biomass removal, and would not benefit from non-fire disturbances C-34

such as livestock grazing, mechanical or hand clearing. Livestock grazing may also damage friable soil of chaparral and scrub stands.

Periodic burning of chaparral is recommended. However, the current fire frequency in the Plan Area might be similar to pre-suppression frequencies because fire suppression has compensated for increased ignition frequencies due to increased human occupation (Keeley, J.E. 2005. International Journal of Wildland Fire 14(3):285-296). Too frequent burning increases the risk of depleting the soil seed bank of chaparral species. In addition, prescribed burning may not be adequate to reduce fuel loads enough to impact fire risk. Winter burns may reduce the soil seed bank through increased mortality due to wet heat. C-34 (Cont.)

Chapter 6. Conditions on Covered Surveys

6.2.1 Planning Surveys/Uncommon Vegetation and Uncommon Landscape Features Pp. 6:5-6

Planning survey should include collection of quantitative plant community data such as the CNPS Rapid Assessment or Releve protocols. Vegetation rarity to the association and even subassociation level should be considered. Because the purpose is to maintain regional native biodiversity, regionally rare natural community types should be considered as an "uncommon vegetation type". The plan should allow other sources of vegetation information on rarity, if they become available instead of defining uncommon types for the Plan as the CDFG list. C-35

6.3.2 Natural Community-Level Measures

Conservation Measure 2.12 Pg. 6-28

The plan only requires avoidance measures for wetlands that are 3 acres or larger. Many of the wetland types including vernal pools are less than 3 acres in size. Avoidance should include vernal pools and alkali wetlands. C-36

Chapter 7: Monitoring and Adaptive Management Program

CNPS appreciates that coordination with CNPS is planned. The procedure of monitoring and adapting to improve conditions based on the monitoring results is admirable. We are concerned, however, that the monitoring and adaptive management procedures seem to apply only to the lands preserved in mitigation for development, not the developed lands. As such, they may be overly stringent and costly. They are scientifically justifiable, and reflect best practice, which is admirable, but CNPS does not support stringent management restraints to preclude setting the lands aside as preserves. C-37

Section 7.2 A pool of Science Advisors is mentioned, but how will they be chosen? C-38

Landscape-Level Monitoring Pp. 7:21-23

Mapping rules and a dichotomous key for determining how to label polygons are recommended for mapping that will be used for monitoring. Clear rules and definitions for mapping land cover or natural community types are required to ensure repeatability required for monitoring. C-39

Mapping invasive plants. Pg. 7-24 C-40

We suggest that instead of mapping several times a year, that fewer resources should be dedicated to monitoring fast spreading non-native species and more resources are dedicated to controlling them. C-40 (Cont.)

7.5 Monitoring and Adaptive Management by Natural Community Type
Change to "Monitoring and Adaptive Management by Land Cover Type" because the units referred to in this section are the previously described land cover types. C-41

Some of the list of covered species associated with each land cover type are incomplete (e.g., grasslands and showy madia). CNPS recommends completing these species lists.

Chapter 9: Funding
On page 9-12, regarding field facility maintenance and utilities being included in the cost for each facility, will field facilities actually be necessary on each preserve? C-42

Appendix D – Species Profiles
Some of the covered plant species profiles, such as Mt. Diablo manzanita (*Arctostaphylos auriculata*), are based on occurrence records from a 2001 version of the CNDDB and the CNPS 2001 *Inventory of Rare and Endangered Plants of California* (sixth edition). Can you please update all profiles to include recent CNDDB 2005 database records and any additional records and information (such as threats) from the CNPS on-line 2005 database? C-43

HCP Table 3.7 and EIR/EIS Section 3.2.5
Although it is unlikely for large flowered fiddleneck (*Amsinckia grandiflora*) to occur within the plan area what type of protection provisions are included in the HCP/NCCP in the case it is present? If there are no such provisions included regarding this scenario why are they not included?

Why was Suisun Marsh aster (*Aster lentus*) not recommended for coverage in light of the fact that it is recorded from Rock Slough in *Rare, Unusual and Significant Plants of Alameda and Contra Costa Counties, Seventh Edition* by Dianne Lake, 2004? Rock Slough is included in the Inventory Area. C-44

Although it is unlikely for alkali milk vetch (*Astragalus tener* var. *tener*) to occur within the plan area what type of protection provisions are included in the case it is present? If there are no such provisions included regarding this scenario why are they not included?

The common name and scientific name do not match in the seventh row in the plant section of table 3.7, what species was intended to appear? Is the species supposed to be heartscale (*Atriplex cordulata*) or crownscale (*Atriplex coronata* var. *coronata*)? If that row is supposed to contain heartscale why is crownscale absent from the table? Crownscale does occur within the inventory area in several locations including Los Vaqueros, Cowell Ranch, Deer Valley, Horse Valley, Marsh Creek Area and Sand Creek (Lake 2004). In regards to the EIR/EIS - Why is this species not included in Table C-2 and covered in the HCP/NCCP in light of this information?

Since the rediscovery of Mount Diablo buckwheat (*Eriogonum truncatum*) it should be recommended for coverage in the inventory area as there is suitable habitat. . State Status designation for Mount Diablo buckwheat (*Eriogonum truncatum*) should be changed to List 1B.

Why was stinkbells (*Fritillaria agrestis*) left off of Table 3-7 (and left off of Table C-2 of the EIR/EIS) when it has been documented from Los Vaqueros, Contra Loma, and the Byron area (Lake 2004)?

Why was California hibiscus (*Hibiscus lasiocarpus*) not recommended for coverage in Table 3-7 (and left off of Table C-2 of the EIR/EIS) in light of the fact that it is recorded from Rock Slough in (Lake 2004)? Rock Slough is included in the Inventory Area. California hibiscus distribution is restricted within the Inventory area, why was it not considered a no-take species in Table 6-5?

Although no extant populations of Contra Costa goldfields (*Lasthenia conjugens*) occur within the Inventory area this species can be easily overlooked and could still be present as suitable habitat is present. Considering this, why was Contra Costa goldfields not recommended for coverage but included on the no-take species list?

C-44 (Cont.)

If three historic collections of little mousetail (*Myosurus minimus* ssp. *aspus*) are recorded from the Inventory Area ((1909, 1955, and 1957 (Lake 2004)) why was this species not recommended for coverage based in Table 3-7 (and left off of Table C-2 of the EIR/EIS) on insufficient information? In addition, why was little mousetail not considered a no-take species in Table 6-5 considering its presence in the Inventory area would be significant?

Although rayless ragwort (*Senecio aphanactis*) has not been seen in the area since 1933 (Lake 2004) if it were discovered in the Inventory Area it would be a significant find. Considering this, it should be considered on the no-take species list (Table 6-5) & (Table C-2 off the EIR/EIS).

Although no occurrences of Livermore tarplant (*Deinandra bacigalupii*) have been reported from Contra Costa County ample suitable habitat is present within the Solano and Pescadero soils in the Inventory area. This species is not listed as Threatened or Endangered but certainly meets that criteria, at the very least under CEQA guideline 15380. With such a sensitive species present in the adjacent county in similar habitat shouldn't it be considered for coverage (Table 3-7) & (Table C-2 of the EIR/EIS), especially since areas in the southern part of the Inventory Area are private and under-botanized? If not recommended for coverage shouldn't Livermore tarplant be considered a no-take species? *D. bacigalupii* is also misspelled in Table 3.7, it should end in two i's.

Although caper-fruited tropidocarpum has not been seen in Contra Costa County since 1981 (Lake 2004) there is also an abundance of suitable habitat in under-botanized private lands, shouldn't it be considered for coverage?

Thank you for the opportunity to participate in this important process. We look forward to being active participants in the implementation phase of the HCP/NCCP process. If you have any questions, please contact me at 510-734-0335.

Sincerely,

Jessica Olson
East Bay Conservation Analyst
California Native Plant Society

Response to Letter C, from the East Bay Chapter of the California Native Plant Society

Response to Comment C-1

In response to the HCP/NCCP, the commenter states that the land cover mapping was flawed because land cover types are inadequate for the applications of the HCP/NCCP. The commenter states that land cover type mapping is inconsistent and not defensible, and that more detailed community data are needed to properly map habitat and thus protect the full range of both common and rare species in the plan area.

The use of land cover types was judged to be the best strategy given the scale of the inventory area, the financial and schedule constraints on the mapping process, and the limited feasibility of distinguishing communities to a finer scale of classification based on aerial photography. More community data and a more detailed classification may well have allowed for more accurate habitat modeling and conservation planning. However, the land cover mapping conducted for the HCP/NCCP provides a sufficient level of detail for a landscape level conservation plan. The land cover mapping in the conservation plan will improve over time as more data are collected and mapping is refined during the implementation phase of the HCP/NCCP. As described in Chapter 7, land cover mapping within the inventory area will be redone every 5 years to aid in continued assembly of the Preserve System. In addition, once preserves are acquired, detailed vegetation sampling will be conducted to assess current conditions and develop a baseline for long-term monitoring, as described in Chapter 7.

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

Response to Comment C-2

In response to the HCP/NCCP, the commenter states that a minimum mapping unit smaller than 10 acres should have been used, and that a statistical measure of error should have been provided. The commenter suggests that CalVeg data should have been used as an alternative data source, and that a dichotomous key describing the decision making process should have been provided to improve mapping repeatability.

A 10-acre minimum mapping unit was judged to be adequate for landscape level conservation planning for most land cover types. It should be noted that habitat features or land cover types that have high conservation value and are typically small (riparian, wind turbine, wetlands, and rock outcrops) were mapped to a minimum mapping unit of 0.25 acres. Although no statistical measure of error was provided for the mapping process, the mapping process underwent a stringent review process that should provide a degree of confidence in their suitability for landscape level conservation planning. The mapping process and the maps themselves were reviewed by the Science Advisory Panel and other experts very familiar with the inventory area. Refinements to the mapping process were made in response to comments from these reviewers, such as additional mapping effort in 2003 to capture the small, critical habitat features noted above. CalVeg mapping was conducted between 1979 and 1981. This data set would not be appropriate for the Plan because these data would not reflect the many changes in land use that have occurred since that time.

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

Response to Comment C-3

In response to the HCP/NCCP, the commenter states that disking of grassland areas probably occurred for dry land farming rather than to improve forage.

Disking is a common practice to facilitate establishment of forage legumes or to control weeds on grazing land to improve forage (cf. Dovell et al. 1990). However, the possibility that disking occurred for dry land farming is correct.

Revisions to the HCP/NCCP

The possibility that disking occurred for dry land farming has now been noted in discussion of grassland.

Response to Comment C-4

In response to the HCP/NCCP, the commenter requests that scientific names of plant species in plant community names be used. The commenter also requests that three additional types of native grassland recognized by the CNDDB be added to those listed in the HCP/NCCP. The commenter also states that it is inadequate to infer effects of grazing management on native perennial grass abundance from two data points.

The convention used in the HCP/NCCP is to provide scientific names when the species is not part of the proper name of a community. Regarding the effects of grazing management, the commenter does not reference specific long-term data supporting their position of native grassland abundance independent of grazing. It has been documented that managed grazing can have a positive impact on the abundance of native perennial grass species (Menke 1992), and the Los Vasqueros Watershed surveys of native grassland extent supports this case. That said, Conservation Measure 2.4 on page 5-80 requires the use of pilot studies to research management techniques (e.g., grazing, prescribed burning, etc.) that promote native grassland species as part of the HCP/NCCP Monitoring and Adaptive Management Program (MAMP). As part of the MAMP, these studies will be reviewed by a pool of Science Advisors and the Resource Agencies who will analyze the implications of grazing management where appropriate.

Revisions to the HCP/NCCP

The additional grassland alliances noted by the commenter have been added to the HCP/NCCP discussion of native grassland.

Response to Comment C-5

In response to the HCP/NCCP, the commenter notes that alkali sacaton is not known from the inventory area, but may occur there. The commenter also notes that creeping ryegrass grassland may occur in alkali habitats.

Creeping ryegrass grassland is not limited to alkali habitats and therefore is not included in the description of alkali grassland.

Revisions to the HCP/NCCP

The HCP/NCCP has been revised to incorporate the information provided about alkali sacaton in discussion of alkali grasslands.

Response to Comment C-6

In response to the HCP/NCCP, the commenter notes that coastal sage scrub is not the correct term to describe soft chaparral in the inventory area. The commenter finds the description of the mapping methods for chaparral and scrub to be unclear. The commenter states that California buckwheat is unlikely to occur in the inventory area, and that bush monkeyflower is a common component of chaparral and scrub.

As identified in the HCP/NCCP, chaparral and sage scrubland cover was identified on the aerial photographs based on its dark, distinctive, and homogeneous signature and location on steep hillsides and mountaintops. The minimum mapping unit for this land-cover type was 10 acres, though smaller patches were mapped where possible when new color aerial photographs became available in 2003 and 2004. In cases where small (less than 10 acres) stands of scattered trees occurred adjacent to patches of chaparral or scrub, the scattered trees were mapped as part of the chaparral or scrub patch.

Revisions to the HCP/NCCP

The references to "coastal sage scrub" in the HCP/NCCP have been changed to "sage scrub", or simply, "scrub". The HCP/NCCP discussion of chaparral and coastal sage scrub has been revised to clarify mapping methods, to add bush monkeyflower, and to delete California buckwheat.

Response to Comment C-7

In response to the HCP/NCCP, the commenter states that oak woodland and mixed evergreen forests should have been mapped separately because of important ecological and compositional differences between the two community types. In addition, the commenter notes that light, substrate, disturbance history, slope and aspect may be important factors in determining understory density in this community, but these factors were not mentioned in the HCP/NCCP.

As stated in the HCP/NCCP in Chapter 3, oak woodland and mixed evergreen woodland intergrade with one another, are functionally similar for wildlife habitat (although there are important differences), contain many of the same canopy tree species (although at different levels of dominance), and are difficult to distinguish on aerial photographs. Consequently, the decision was made to map these two community types as one land cover type.

Revisions to the HCP/NCCP

In response to comments about factors affecting understory density, revisions have been made to the HCP/NCCP discussion of oak woodland and mixed evergreen woodland.

Response to Comment C-8

In response to the HCP/NCCP, the commenter states that tanoak is not known form the East Bay, that coast live oak, interior live oak and canyon live oak can be components of mixed evergreen forest in the inventory area, that aspect and slope play a role in the distribution of oak woodlands and mixed

evergreen forest, and that wildlife use of these two communities differs depending on the abundance of oaks.

In terms of the presence of oak species in mixed evergreen forest, the HCP/NCCP in Chapter 3, states that "Because the transition between oak woodland and mixed evergreen forest is gradual, evergreen oaks such as coast live oak, interior live oak, and canyon live oak (*Quercus chrysolepis*) are often common codominants." This is meant to state that coast live oak, interior live oak, and canyon live oak can be components of mixed evergreen forest, not just in the transition zone. Thus, the HCP/NCCP is consistent with the commenter on this point. While wildlife use is likely to differ somewhat based on the abundance of oaks, the two communities are relatively similar to one another in terms of wildlife use, as oak species are important components of both communities. For the purposes of landscape level conservation planning, the two communities are sufficiently similar in terms of wildlife use that the HCP/NCCP's approach is appropriate.

Revisions to the HCP/NCCP

In response to the comment about tanoak and the comment about aspect and slope, the HCP/NCCP's discussion has been revised to delete tanoak and note the role of aspect and slope.

Response to Comment C-9

In response to the HCP/NCCP, the commenter states that it might be beneficial to provide a variety of criteria for defining riparian vegetation and zones.

In Chapter 3, the HCP/NCCP provides a number of characteristics that can aid in identification of riparian woodland and scrub. However, it was determined that a specific set of criteria or minimum zones could unduly restrict the definition of riparian woodland and scrub, and riparian vegetation generally.

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

Response to Comment C-10

In response to the HCP/NCCP and the EIS/EIR, the commenter states that the following sources should have been consulted, or consulted more extensively.

- Rare, Unusual and Significant Plants of Alameda and Contra Costa Counties (Lake 2004)
- UC/Jepson Herbaria's SMASCH database
- Sacramento District of the USFWS's list of Plant Species of Concern
- Dianne Lake

The commenter also states that species should not have been rejected as covered species because they had no known records presumed extant in the inventory area.

The HCP/NCCP notes in Chapter 3 that data used in the selection of covered species included an informal consultation with USFWS (letter request). The response to this letter request was the provision of a USFWS list of plant species of concern for the inventory area; this source was therefore consulted. The HCP/NCCP also notes in Chapter 3 that Jones & Stokes biological resource

specialists, such as Dr. Rob Preston, were consulted. These specialists are very familiar with the content in the first two sources cited above. In addition, members of the East Bay Chapter of CNPS have been a consistent participant in meetings of the Habitat Conservation Plan Association (HCPA) Coordination Group (i.e., stakeholder committee) of the HCP/NCCP since 2002, and their input was considered even if they are not specifically cited in the document. The HCPA Coordination Group also was opportunities to review early drafts of the HCP/NCCP, including early draft lists of covered species.

Species without occurrences presumed extant in the inventory area were not necessarily rejected as covered species. For example, showy madia was included as a covered species despite the fact that the one historically documented occurrence in the inventory area could not be relocated during recent surveys. The HCP/NCCP states in Chapter 3 that, among the criteria for covered species selection was whether "[s]ufficient data exists on the species' life history, habitat requirements, and occurrence in the inventory area to adequately evaluate impacts on the species and to develop conservation measures to mitigate these impacts in accordance with regulatory standards. Data adequacy was a subjective decision based on professional judgment." For some species it was determined that insufficient data were available to meet the above criterion (see Table 3-7 in the HCP/NCCP). The HCP/NCCP did consider species that could be rediscovered in the inventory area. For example, Mount Diablo buckwheat was listed as a "no-take" species (i.e., a species that must be avoided by any covered activity) well before it was rediscovered on Mount Diablo in 2005. Any species not list as no-take or a covered species would simply not be listed on the final permits and would therefore not have take authorization granted by this Plan.

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

Response to Comment C-11

In response to the HCP/NCCP and the EIS/EIR, the commenter states that CEQA guideline 15125 should be interpreted to require evaluation of environmental impacts to CNPS List 3 and 4 species, as well as A-1 and A-2 list species from Lake (2004).

The comment is not relevant to the HCP/NCCP, as that document is concerned with compliance with the federal and state Endangered Species Acts, not with CEQA.

The comment is relevant to the EIS/EIR. The EIS/EIR is based on a different interpretation of CEQA guideline 15125. CEQA guideline 15125c states "Knowledge of the regional setting is crucial to the assessment of environmental impacts. Special emphasis should be placed on environmental resources that are rare or unique to that region and would be affected by the project." The EIS/EIR interprets this guideline to require analysis of impacts to environmental resources that are generally rare, or are unique to the region in question (i.e. not found in other regions). Plant species on CNPS list 1B (Rare, threatened, or endangered in California and elsewhere) or 2 (Rare, threatened, or endangered in California, but more common elsewhere) are included in this category. However, it was determined that CNPS List 3 (Review List, more information needed to determine status) and 4 (Watch list, limited distribution) do not necessarily meet the criterion of being rare, or unique to the region. Species listed in Lake (2004) as A-1 (currently known from 2 or less regions in Alameda and Contra Costa Counties) or A-2 (currently known from 3 to 5 regions in the two counties, or, if more, meeting other important criteria such as small populations, stressed or declining populations, small geographical range, limited or threatened habitat, etc.) also do not necessarily meet the criterion of rarity or uniqueness, as these rankings are based on distribution in the two counties and not statewide. While List 3 or 4 or A-1 or A-2 ranking did not necessarily result in analysis of environmental

impacts to a given plant species, these species were considered for analysis, as evidenced by the analysis of impacts to adobe navarretia, a covered species listed as A-2 by Lake (2004) and not listed by CNPS (2005).

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

Response to Comment C-12

In response to the HCP/NCCP, the commenter asks why additional references for covered species locations were not consulted, such as Lake (2004) and the UC/Jepson Herbaria SMASCH database.

These references have been consulted for each of the covered species to determine if additional occurrences are documented in these sources.

Revisions to the HCP/NCCP

Revisions have been made to the HCP/NCCP to incorporate additional occurrences for San Joaquin spearscale, adobe navarretia, big tarplant, Brewer's dwarf flax, and round-leaved filaree.

Response to Comment C-13

In response to the HCP/NCCP, the commenter asks whether the footprints of temporary impacts outside the ULL will be subject to monitoring/adaptive management as described in Chapter 7.

The estimated acreage of temporary impacts outside the ULL used in the HCP/NCCP is conservative. The impacts of temporary activities will be tracked when these activities are first authorized for take coverage under the Plan. As with any other covered activity, project proponents are required to submit a survey report that includes a description of the existing conditions (see Chapter 6). Chapter 9 of the HCP/NCCP has also been modified to require the proponents of projects with temporary impacts to document that disturbance and recovery occurred at the predicted intervals. However, after this point temporary impacts will not be tracked as part of the monitoring and adaptive management plan.

Revisions to the HCP/NCCP

Revisions have been made to the Section 9.3.1 of the HCP to require the proponents of projects with temporary impacts to document that disturbance and recovery occurred at the predicted intervals.

Response to Comment C-14

In response to the HCP/NCCP, the commenter suggests that a qualitative discussion of impacts to sensitive natural communities should be added to the impact discussion in Section 4.3. The commenter asks whether impacts to rare communities will require compensatory mitigation under the HCP/NCCP. The commenter suggests that impacts to sensitive communities be minimized under the HCP/NCCP. The commenter suggests caps on impacts to undifferentiated wetlands, seasonal wetlands and alkali wetlands. The commenter expresses concern that impact and protection estimates are inaccurate due to the coarse scale of land cover mapping and the lack of an accuracy assessment.

Impacts to some sensitive communities will require compensatory mitigation. For example, impacts to wetlands and riparian woodland require compensatory mitigation (see Tables 5-5a, 5-5b, 5-16 and 5-17). Other sensitive communities are not specifically protected by the HCP/NCCP. However, assembly rules for the HCP/NCCP Preserve System include provisions to "preserve the highest-quality communities", "fully represent environmental gradients", and "consider the full ecological diversity within communities" (see Chapter 5). To achieve these goals, the Implementing Entity will preserve the full range of sensitive communities in the inventory area.

It should be noted that projects the receive coverage under the HCP/NCCP will still be subject to CEQA review, and CEQA may require mitigation for impacts to sensitive communities.

Caps on wetland impacts are currently being negotiated with the US Army Corps of Engineers and the State Water Quality Control Board as part of a parallel regional wetland permitting process. While the HCP/NCCP does not place per-project caps on wetland impacts, these impacts are limited by the requirement to mitigate by protection, restoration Chapter 5 of the HCP/NCCP, is relevant:

"Impacts on all aquatic land-cover types will be limited to the amount of the same land-cover type available for acquisition in accordance with the preservation ratios in Table 5-5. Preservation ratios were determined on the bases of the following factors.

- The rarity and irreplaceability of the land-cover type within the inventory area (rarer and more irreplaceable land-cover types have higher ratios).
- The biological value of the land-cover type (e.g., overall biological diversity, function as habitat for covered species, ecosystem function).
- Standard mitigation ratios used by state and federal regulatory agencies (these ratios were used as starting points rather than guides for this Plan)."

The HCP/NCCP does have caps on the total allowable impact under the plan to all land cover types (see Tables 4-2 and 4-3).

While impact and protection estimates are limited in their accuracy by the mapping techniques used, these estimates are adequate for conservation planning at the scale of the permit area. See the responses to comments C-1 and C-2 above.

Revisions to the HCP/NCCP

The text of the HCP/NCCP has been revised to note that small patches of native grassland may occur within the urban development area.

Response to Comment C-15

In response to the HCP/NCCP, the commenter expresses concern that limited information about the status of covered plant species occurrences could result in the loss of the only remaining occurrence in the inventory area. The commenter also notes that additional information about individual covered species occurrences would be important in setting conservation priorities. The commenter requests that additional information about individual occurrences of covered plant species be included in the text. The commenter suggests that changes in hydrology should be included as potential indirect impacts from covered activities.

We agree that the best scientific information available about covered plant species occurrences should be utilized in setting conservation priorities and in determining if and when occurrences may be removed by covered activities. However, we do not agree that it is necessary or appropriate to include this information in the HCP/NCCP itself. The HCP/NCCP establishes procedures to utilize available information in setting conservation priorities and permitting impacts.

The HCP/NCCP addresses the constraints imposed by limited information about covered plant species habitat requirements by tracking impacts to covered plant species by occurrences or populations. Removal of covered plant species occurrences will only be permitted under the HCP/NCCP once an equivalent number of equally healthy or healthier occurrences has been protected. As stated in Chapter 5 of the HCP/NCCP, "the size of the [plant] populations preserved (measured in terms of acreage and either plant cover or number of individuals, whichever is most appropriate for the species and site) must always be at least as large as the populations of the same species lost to covered activities. A healthy population of covered plants is defined as one that has a stable or increasing population growth rate or has a high potential to increase in size with improved management."

Revisions to the HCP/NCCP

In response to the suggested addition of an indirect impact through hydrological modification, revisions have been made to identify that changes in hydrology could degrade habitat through modification of soil alkalinity or hydroperiod.

Response to Comment C-16

In response to the HCP/NCCP, the commenter suggests that potential impacts to Contra Costa goldfields should be considered outside the context of designated critical habitat, because critical habitat does not include all potential habitat, which is more extensive and faces larger potential impacts.

Contra Costa goldfields is a designated no-take species. The HCP/NCCP discusses impacts to designated critical habitat, but is not required to discuss impacts to potential habitat for species that are not covered species. As a no-take species, all covered activities are required to demonstrate complete avoidance of Contra Costa goldfields in order to receive take authorization for the covered species under the Plan.

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

Response to Comment C-17

In response to the HCP/NCCP, the commenter states that the conservation plan should be flexible so that it can incorporate better vegetation and species data as it becomes available.

The commenter suggests that Natural Community-Level Goals for all habitat types should include a measure to protect the full range of community diversity at least at the alliance level.

The commenter suggests that species-level goals should call for the protection of more occurrences of the covered plants, as there may be more occurrences of these species that have not been identified as yet.

The HCP/NCCP is flexible and will collect and incorporate better data as the plan is implemented. Chapter 7, Monitoring and Adaptive Management Program, describes some of the processes by which the plan will collect and incorporate new data.

Natural community-level goals (see Table 5-1) were designed to be broad and accessible. Objectives and conservation measures provide an additional level of specificity in describing how goals will be met. As the commenter notes, HCP/NCCP preserve design principles will consider alliance-level community diversity. Natural community-level objectives also discuss the protection of community diversity at this level. For example, Objective 10.2, found in Table 5-1, calls on the Implementing Entity to "Protect native grassland alliances within the Preserve System."

Species-level goals were designed to be achievable based on existing data about the number of covered species occurrences in the inventory area. If additional occurrences are identified, they will be considered in setting conservation priorities. However, setting goals based on the assumption that new occurrences will be identified may make it impossible to achieve stated goals.

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

Response to Comment C-18

In response to the HCP/NCCP, the commenter suggests that a discussion of the likelihood that land will be available to be acquired for the preserve systems, and that will sellers will be found, be included in the document.

An assessment of the likelihood of finding willing sellers is difficult to make without contacting a large cross section of landowners and is not appropriate to include in the HCP/NCCP prior to permit issuance. The HCPA has been in discussions with several landowners during Plan development who have expressed some interest in selling their land to the Implementing Entity, demonstrating that there is interest among landowners. Furthermore, more than 20,000 acres of land has been already been acquired by EBRPD and other land conservation organizations from willing sellers in the HCP/NCCP inventory area. Finally, as documented in Table 5-21 and Figure 5-12 of the HCP/NCCP, 2,383 acres of land have been acquired or preserved during development of the HCP/NCCP that may be counted toward fulfilling the requirements of the HCP/NCCP once managemen is ensured. This is equivalent to almost 10% of the total acres projected to be acquired under the initial urban development area during the 30 year term of the permits. Additional acquisitions are in progress. The HCP/NCCP does discuss measures to prevent excessive development impacts from being permitted before land is protected or other steps are taken to mitigate these impacts. For example, the Stay Ahead provision will require changes in Plan implementation if land protection is not occurring rapidly enough. One possible change would require applicants to dedicate land instead of paying a fee (see Chapter 9).

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

Response to Comment C-19

In response to the HCP/NCCP, the commenter suggests that a goal be added to preserve native biological diversity to the alliance level, and as many associations as possible, in grasslands within the Plan Area.

See response to comment C-17 above.

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

Response to Comment C-20

In response to the HCP/NCCP, the commenter requests that a goal be added to protect all of the oak woodland and evergreen forest alliances and as many associations as possible within the Plan Area.

Two oak woodland community types, coast live oak woodland and blue oak woodland, are noted in Chapter 5 of the HCP/NCCP as receiving substantial protection under the Plan. Also see response to comment C-17 above.

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

Response to Comment C-21

In response to the HCP/NCCP, the commenter suggests that populations of showy madia should be protected in grassland and oak woodland habitats, and that it should be noted that showy madia is found more often in open habitats than oak woodland. The commenter also suggests that a species-level protection goal for Mount Diablo fairy lantern be added to the oak woodland species-level goals.

Revisions were made to respond to the comments regarding showy madia.

Oak woodland is recognized in the HCP/NCCP as suitable habitat for Mount Diablo fairy lantern (see the species account in Appendix D of the Plan). The species is listed in Table 5-1 among the covered species expected to benefit from oak woodland protection and management. Objective 27.5 in Table 5-1 (" Protect at least one occurrence of Mount Diablo fairy lantern outside currently protected public lands") is also relevant to the species in oak woodlands.

Revisions to the HCP/NCCP

The HCP/NCCP was revised to note habitat details for showy madia and to note that showy madia is a species benefiting from grassland biological objectives.

Response to Comment C-22

In response to the HCP/NCCP, the commenter requests that a goal be added to protect all of the chaparral and scrub alliances and as many associations as possible within the Plan Area, and a goal be added to maintain a disturbance regime that maintains biological diversity in this cover type.

Objective 24.1 in Table 5-1 calls for the Implementing Entity to " Protect 550 acres of chaparral/scrub that support a diversity of native plant alliances including chaparral, California sage scrub, and black sage scrub." As the commenter notes, HCP/NCCP preserve design principles will consider alliance-level community diversity.

Objectives under Goal 25, in Table 5-1, address concerns regarding disturbance regime in chaparral and scrub. These objectives are as follows:

- "Objective 25.1. Maintain or mimic the natural fire regime

- Objective 25.2. Maintain a mosaic of stand ages and species composition across the landscape
- Objective 25.3. Promote canopy gaps within chaparral/scrub patches."

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

Response to Comment C-23

In response to the HCP/NCCP, the commenter requests that a goal be added to protect all of the chaparral alliances and as many associations as possible within the Plan Area.

See response to comment C-22 above.

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

Response to Comment C-24

In response to the HCP/NCCP, the commenter suggests that the HCP/NCCP include a discussion of the importance of reference stands for use in setting success criteria for habitat enhancement, restoration and creation.

We concur that reference stands of different land cover types are important to establish a baseline condition by which restoration and enhancement standards can be developed. As described in Chapter 7, the Monitoring and Adaptive Management Program, specific monitoring protocols will be developed during Plan implementation. These protocols will include assessment and use of reference stands of land cover types.

Revisions to the HCP/NCCP

Discussion of the importance of reference stands has been added to Chapter 5 of the HCP/NCCP in regards to establishing habitat enhancement, restoration, and creation success criteria.

Response to Comment C-25

In response to the HCP/NCCP, the commenter suggests that an increase in relative cover of native species, and a decrease in relative cover of non-native species, should be used to measure habitat enhancement success in communities inherently low in species richness, cover and productivity. The commenter also suggests that a decrease in inappropriate disturbance be used as an alternative success measure to a decrease in soil compaction, because soil compaction may be beneficial in certain habitat types where ponding enhances habitat. The commenter notes that restoration, enhancement and creation projects need to be planned sufficiently in advance to allow adequate time to collect local seeds and cuttings to contract grow. The comment regarding advance planning of restoration, enhancement, and creation projects is noted.

Revisions to the HCP/NCCP

The HCP/NCCP text was revised to note that enhancement may be measured by increase in relative cover of native plants or a decrease in inappropriate disturbance.

Response to Comment C-26

In response to the HCP/NCCP, the commenter notes with approval that wetlands and streams will be classified at the association or alliance level rather than as a single land cover type, and that adequate upland buffers will be protected as well. The commenter suggests that these strategies be followed for all community types.

Wetlands and streams were treated differently in the HCP/NCCP because, as noted in Chapter 5, these communities exhibit an especially high degree of biological, physical, and hydrologic diversity in the inventory area. However, as noted above in responses to Comments C-19, C-20, and C-22, diversity at the alliance level will be taken into consideration in preserve design generally, and in protection of grasslands and chaparral/scrub communities in particular. Upland buffers are particularly important for wetlands and streams because of their influence on hydrology and water quality, in addition to their habitat enhancement effects. However, the HCP/NCCP does require that lands adjacent to protected areas be managed in a manner that will minimize negative effects on the adjacent preserve. See Conservation Measures 1.8 and 1.9 in Chapter 6.

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

Response to Comment C-27

In response to the HCP/NCCP, the commenter suggests that buffers for fuel load reduction be established as part of the preserve design process, and that these buffers should not count towards protected acreage.

See Conservation Measure 1.8, Establish Fuel Management Buffer to Protect Preserves and Property. As stated in Chapter 6, "Buffer zones within new development will not count toward land acquisition requirements or land dedication in lieu of development fees." Conservation Measure 1.8 applies to new development adjacent to preserves. In reference to preserves adjacent to existing development, it is stated in Chapter 5 that "any area adjacent to development disked for fuel management (e.g., 50–100 foot width) will not be credited towards land acquisition requirements."

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

Response to Comment C-28

In response to the HCP/NCCP, the commenter suggests that fire effects should be monitored in preserves, and that potentially vulnerable vegetation types should be considered in decisions to allow areas to burn or to conduct prescribed burns.

The HCP/NCCP notes that part of preserve management will be management of fuel loads to minimize the risk to biological resources from catastrophic wildfire. A discussion of the requirement for preserve fire management plans includes the statement in Chapter 5 that "The fire management plan must include a clear decision system to be used in determining when a wildfire will be left to burn and when it must be partially or wholly contained to prevent damage to structures, prevent injuries, or **cause excessive disturbance to natural communities.**" (Emphasis added). Management using prescribed fire is most likely to be used in chaparral communities. However, the HCP/NCCP notes that if fires are too frequent they may have negative effects. Therefore, Conservation Measure 2.8 calls for study of the current condition and fire history of chaparral in the inventory area, and

states "prescribed burns should be used sparingly and strategically in this vegetation community. Prescribed burns will be used only when necessary to reduce extreme fire hazards in areas of likely fire risk or to enhance unoccupied habitat for Alameda whipsnake or habitat occupied by Mount Diablo manzanita."

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

Response to Comment C-29

In response to the HCP/NCCP, the commenter recommends a mitigation ratio of 3:1 or higher for restoration or creation of land-cover types that are difficult to restore or create.

The restoration and creation requirements are in addition to preservation requirements, which are 3:1 for alkali wetlands and seasonal wetlands, the aquatic land cover types considered most difficult to restore or create. See Table 5-5 for acquisition requirements for aquatic land cover types. When considered together with restoration or creation requirements (2:1 for these wetland types), mitigation ratios for difficult to restore wetland types are 5:1 for both alkali wetland and seasonal wetland. These ratios were judged to be adequate to mitigate for development impacts, conserve these natural communities, and contribute the recovery of covered species supported by these communities.

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

Response to Comment C-30

In response to the HCP/NCCP, the commenter recommends that grassland be classified to the association level rather than the alliance level to increase conservation of grassland biodiversity.

Field mapping of native grasslands will involve collection of supplemental data to allow for the conservation of biodiversity beyond the dominant species (see page 7-24 for a description of natural community inventory protocols). Management of grassland areas will rarely be conducted through blanket application of techniques across an entire alliance. As stated in Chapter 5, "Enhancing grasslands within HCP/NCCP preserves will likely require applying many of these management techniques simultaneously at different sites and on different scales in order to create a mosaic of grassland conditions." The diversity of management techniques within an alliance is likely to result in conservation of grassland biodiversity beyond the dominant species.

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

Response to Comment C-31

In response to the HCP/NCCP, the commenter contends that the HCP/NCCP misinterprets the findings of Meyer and Schiffman (1999) in stating that mulch is beneficial to native forbs in drier grasslands.

Revisions to the HCP/NCCP

The text has been revised to note that reducing much by raking or winter burning did not increase annual forb cover in drier grasslands per the reference from Meyer and Schiffman.

Response to Comment C-32

In response to the HCP/NCCP, the commenter states that a much more rigorous consideration of the effects of fire and grazing are needed to determine appropriate management regimes for grasslands.

As described in Conservation Measure 1.2 in Chapter 5, development of preserve management plans for specific preserves will involve further consideration of these issues. Furthermore, as stated in Chapter 8, management plans will be reviewed by a pool of Science Advisors who will point out the implications of fire and grazing management where appropriate.

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

Response to Comment C-33

In response to the HCP/NCCP, the commenter states that fungal diseases other than Sudden Oak Death may be a threat to oak woodlands in the inventory area.

We concur with the commenter that other diseases could become a threat to oak woodlands over the life of the HCP/NCCP. As described in Chapter 7 of the HCP/NCCP, natural community-level monitoring will identify local threats to communities and habitats. Adaptive management actions and modified conservation measures may be established as such threats are identified.

Revisions to the HCP/NCCP

The text was revised to note the potential for fungal diseases other than SOD.

Response to Comment C-34

In response to the HCP/NCCP, the commenter notes that different associations of chaparral likely respond differently to fires, and some species require smoke and heat for germination. The commenter also cautions that livestock grazing may damage friable soils in chaparral and scrub communities and that prescribed burns should not be conducted too frequently in chaparral because of the risk of depleting seed banks of chaparral species. The commenter also cautions that winter burns may result in increased seed bank mortality due to wet heat.

We concur that prescribed burns should be used with caution in chaparral and scrub communities. The commenter is referred to Conservation Measure 2.8 in Chapter 5 and the response to comment C-28 above for a discussion of the careful use of prescribed fire in chaparral. We also agree that grazing should be used cautiously. Soil conditions will be taken into account in developing management plans, and management techniques will be determined on a site-specific basis. The revisions below are made in response to the comments concerning the need for smoke and heat for some species, and the danger of winter burns. Pile burns are added as a potential management technique in order to provide smoke and heat to trigger germination in at least a limited area, and cautions have been added to the discussion of winter burns.

Revisions to the HCP/NCCP

The text has been revised to note pile burning as a potential management technique and to note the cautious use of fall and winter burns in order to minimize excessive seed bank mortality due to lengthy smoldering fired in wet soil conditions.

Response to Comment C-35

In response to the HCP/NCCP, the commenter recommends that planning surveys involve collection of quantitative plant community data and consider vegetation rarity at the association or subassociation level. The commenter also recommends that regionally rare natural community types be considered "uncommon vegetation types." The commenter also suggests that other sources of vegetation information on rarity aside from the CDFG list be incorporated in planning if other sources become available.

Planning surveys must document vegetation at the land cover level. In addition, planning surveys must document uncommon vegetation alliances and landscape features. Further pre-construction surveys may be required if initial planning surveys indicate that valuable biological resources, such as habitat for certain covered wildlife species. These requirements strike a reasonable balance between requiring adequate surveys to track development impacts and ensure avoidance and minimization of impacts to critical biological resources, while not imposing overly onerous requirements on applicants, such that participation in the Plan would be reduced.

Regional status of vegetation types (e.g., Wild 2002) was considered in developing the conservation strategy for the HCP/NCCP. However, the definition of uncommon vegetation alliances, like the definition of rare species, is based on statewide distribution, as discussed above in the response to comment C-11.

The HCP/NCCP states in Chapter 6 that "It is not possible to create a complete list of the uncommon vegetation alliances or uncommon landscape features present in the inventory area. In addition, current understanding of vegetation alliances in California and the determination of which alliances are rare can change over time. These lists are meant as guides to inform the selection of rare vegetation alliances or other landscape features that should be considered in an assessment of impact sites or potential preserves. The assessment should be based on the accepted professional standards at the time (e.g., California Department of Fish and Game 2003)." The implication of this statement is that the CDFG list may not be the only means of determining what constitutes an uncommon vegetation alliance or landscape feature. Input from the public, the Science Advisors, and the Independent Conservation Assessment Team may lead to the addition of new sources of information for determining what constitutes a rare vegetation alliance. For example, the revised Manual of California Vegetation, due to be released in the next few years, is likely to be an important reference in defining uncommon vegetation alliances.

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

Response to Comment C-36

In response to the HCP/NCCP, the commenter suggests that avoidance measures be required for vernal pools and alkali wetlands that are less than 3 acres in size.

The goal of the HCP/NCCP regarding avoidance and mitigation of wetland impacts is stated in the following passage from Chapter 6: "Like avoidance and minimization measures for terrestrial

habitats, this conservation measure is not intended to create small, isolated wetland mitigation sites. Some impacts on aquatic land-cover types are expected under the Plan. The intent of the Plan is to concentrate mitigation for filled aquatic features in areas away from urban development and within large preserves that are linked to existing protected areas. Larger preserves will make it more effective to protect, enhance, and restore wetlands. The analysis conducted in this Plan assumes that small, isolated wetlands will not be avoided on projects within the urban development area." Thus, avoidance measures on small, isolated features are regarded as an inferior use of conservation resources compared to preservation, restoration, or creation of wetlands connected to or located within large preserve areas.

Additional protection for vernal pools and some other wetland features is provided through species-level conservation measures for covered shrimp species. The HCP/NCCP requires that applicants avoid and minimize impacts to suitable habitat for covered shrimp species, as defined in Appendix D. For example, Appendix D defines suitable habitat for vernal pool fairy shrimp as follows: "This species is usually associated with vernal pools (79%) but can also be found in association with other ephemeral habitats including alkali pools, seasonal drainages, stock ponds, vernal swales and rock outcrops."

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

Response to Comment C-37

In response to the HCP/NCCP, the commenter expresses concerns that monitoring and adaptive management procedures apply only to preserves, and not to developed lands. The commenter expresses concern that stringent management restraints may preclude protecting land in preserves.

Monitoring and management procedures for biodiversity conservation would not be appropriate for developed lands, which are likely to retain little or no habitat value after implementation of the covered activity. Management requirements are not expected to preclude land protection. Furthermore, if too many resources were diverted away from land protection to land management, additional development impacts could not be permitted under the Plan, because protection would not be keeping pace with development as required by the Stay Ahead provision.

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

Response to Comment C-38

In response to the HCP/NCCP, the commenter asks how science advisors will be chosen.

Science Advisors will be appointed by the HCP/NCCP Governing Board. The process and criteria for selection of advisors has not yet been formally determined, but they are likely to be similar to those described in Chapter 1 of the HCP/NCCP for the process used to select the Science Advisory Panel convened during Plan development.

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

Response to Comment C-39

In response to the HCP/NCCP, the commenter recommends that mapping rules and a dichotomous mapping key be used for mapping that will be used for monitoring, in order to ensure repeatability.

The mapping rules described in Section 3.2.2 will serve as the basis for ongoing mapping during Plan implementation. In the cases where vegetation where will be mapped to a finer level of classification (for example, native grasslands within the preserves), a refined mapping methodology will be used. This mapping methodology will be documented so that it may be used for long-term monitoring efforts.

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

Response to Comment C-40

In response to the HCP/NCCP, the commenter suggests that fewer resources be devoted to mapping fast-spreading non-native invasive plant species and more resources be devoted to controlling them.

The comment refers to the following statement in Chapter 7 of the HCP/NCCP: "For example, nonnative plants that occur within the preserves and have the ability to spread rapidly will be monitored more frequently (e.g., several times per year). Species that spread slowly will be monitored less frequently (e.g., every 3–5 years). Additionally, Implementing Entity field staff will look for occurrences of new invasive plants that require immediate eradication or control actions within the HCP/NCCP preserves."

This statement is not intended as a prescription to be applied to all fast spreading species, but is intended to apply to occurrences of such species that appear to be spreading extremely quickly. Such monitoring will not preclude control of these species, as indicated by the statement that monitoring will locate occurrences that require immediate eradication or control. This type of frequent monitoring is likely to be used as much to monitor response to ongoing control efforts as to track the species distribution.

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

Response to Comment C-41

In response to the HCP/NCCP, the commenter suggests that the heading "Monitoring and Adaptive Management by Natural Community Type" be changed to "Monitoring and Adaptive Management by Land Cover Type." The commenter also recommends adding all covered species that may occur within a given natural community to the covered species list for each community.

The term "land cover types" includes developed land covers whose condition is dominated by human influence, such as urban, turf, and irrigated agriculture. The term "Natural Community Type" is refers to land cover types whose characteristics are not as dominated by human management, such as chaparral and scrub, and is therefore appropriately used in this instance.

Revisions to the HCP/NCCP

Covered species lists were revised to add showy madia [oak woodland], Mount Diablo fairy lantern [chaparral/scrub and round-leaved filaree [grassland].

Response to Comment C-42

In response to the HCP/NCCP, the commenter asks whether field facilities will be necessary on each preserve.

The need for field facilities will be determined on a site-specific basis. Some preserves may not need field facilities. The calculation of field facility maintenance costs was based on the acreage of preserves, growing as more land is protected. We considered it reasonable to assume that more field facilities may be needed as additional acreage is added to the preserve system, although we agree that every individual preserve may not require a field facility.

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

Response to Comment C-43

In response to the HCP/NCCP, the commenter asks that plant species profiles in Appendix D be updated to include information the 2005 version of the CNDDB and CNPS databases.

Revisions to the HCP/NCCP

All plant species profiles in Appendix D have been updated to reflect information in the 2005 databases.

Response to Comment C-44

In response to the HCP/NCCP, the commenter asks what protection the HCP/NCCP would provide for large-flowered fiddleneck (*Amsinckia grandiflora*) in the event that it is present in the Inventory area. The commenter also asks why Suisun marsh aster (*Aster lentus*) was not recommended for coverage, as it is recorded from Rock Slough within the Inventory Area. The commenter also asks what protection the HCP/NCCP would provide for alkali milk vetch (*Astragalus tener* var. *tener*) in the event that it is present in the Inventory area.

The commenter notes that the scientific and common names in the seventh row of Table 3-7 do not match and asks what species was intended to appear. The commenter also asks why crownscale (*Atriplex coronata* var. *coronata*) was not recommended for coverage, as it is recorded from several locations within the Inventory Area.

In response to the EIS/EIR, the commenter asks why crownscale is absent from Table C-2.

In response to the HCP/NCCP and the EIS/EIR, the commenter suggests that Mt. Diablo buckwheat (*Eriogonum truncatum*) should be a covered species, because it has been documented within the Inventory Area and suitable habitat is available. The commenter notes that the status for this species in Table C-2 of the EIR should be changed to 1B.

In response to the HCP/NCCP and the EIS/EIR, the commenter asks why stinkbells (*Fritillaria agrestis*) is not included on Table 3-7 of the HCP/NCCP and Table C-2 of the EIS/EIR, as it has been documented in several locations within the Inventory Area.

In response to the HCP/NCCP and the EIS/EIR, the commenter asks why California hibiscus (*Hibiscus lasiocarpus*) is not included on Table 3-7 of the HCP/NCCP and Table C-2 of the EIS/EIR, as it has been documented within the Inventory Area. The commenter suggests that California hibiscus should be designated as a covered species or a no-take species under the HCP/NCCP.

In response to the HCP/NCCP, the commenter suggests that Contra Costa goldfields should be a covered species rather than a no-take species, because the species may be present in the Inventory area, even if it is not currently documented there.

In response to the HCP/NCCP and the EIS/EIR, the commenter asks why little mousetail (*Myosrus minimus* ssp. *aspus*) is not included on Table 3-7 of the HCP/NCCP and Table C-2 of the EIS/EIR, as it has been historically documented within the Inventory Area. The commenter suggests that this species should be a no-take species.

The commenter suggests that rayless ragwort (*Senecio aphanactis*) should be designated a no-take species and included on Table C-2 of the EIS/EIR, because, although no occurrences have been sighted in the area since 1933, if an occurrence were sighted, it would be significant.

The commenter suggests that Livermore tarplant (*Deinandra bacigalupii*) should be a covered species or a no-take species under the HCP/NCCP, as it occurs in the neighboring county and ample suitable habitat is present in the Inventory Area. The commenter also notes that the scientific name of this species is misspelled in Table 3.7 of the HCP/NCCP.

The commenter suggests that caper-fruited tropidocarpum (*Tropidocarpum capparideum*) be considered for coverage under the HCP/NCCP.

Large flowered fiddleneck is designated as a no-take species by the HCP/NCCP (see Table 6-5). As such, the HCP/NCCP requires that applicants document avoidance of impacts to this species through planning surveys to document the absence of this species from areas where covered activities are permitted, and through the protection and management of any occurrences that are identified. See also Conservation Measure 1.1 in Chapter 6.

Suisun Marsh aster is typically found in marshes subject to tidal influence. The boundaries of the inventory area for the HCP/NCCP were drawn to exclude tidal areas, as indicated in the following text from Chapter 1: "The northern boundary of the inventory area is defined by the San Joaquin River shoreline. Current and historic tidal areas (as determined by Soil Conservation Service soil surveys [1977]) are excluded to avoid duplicating other conservation efforts focused on species and natural communities restricted to the Sacramento–San Joaquin Delta. This excludes the northern edges of Bay Point, Pittsburg, and Oakley. The eastern boundary of the inventory area was defined by the course of the westernmost Delta sloughs between Oakley and the Alameda–Contra Costa County line near Clifton Court Forebay. Former tidal areas were excluded from the eastern boundary of the inventory area." While one occurrence may be found in the inventory area, as suggested by the commenter, the general lack of suitable habitat for this species in the inventory area, and consequent lack of impact to the species from covered activities, justifies not recommending it be designated a covered species. Because Suisun Marsh aster is not a covered species, there would be no take authorization provided by the HCP/NCCP for covered activities, so project proponents would need to mitigate for impacts to this species separately.

Alkali milk vetch is designated as a no-take species under the HCP/NCCP. See the discussion of large flowered fiddleneck above for more information on protection for no-take plant species.

The scientific name in the seventh row of Table 3-7 is in error. The species is intended to be heartscale (see revision below). Crownscale is absent from the table because it is not considered sufficiently rare to be included; only select species that were not CNPS list 1A, 1B, or 2 species were included, if they were considered to be sufficiently rare statewide. Crownscale's distribution includes occurrences in ten counties. Table C-2 of the EIS/EIR does not generally include CNPS List 4 species, for reasons discussed above in the response to comment C-11.

Mount Diablo buckwheat was rediscovered after the HCP/NCCP had been under development for several years. See response to comment C-10 above for more discussion of this species. The status of this species has been revised in Table 3-7 (see below).

Stinkbells was not included in Table 3-7 of the HCP/NCCP and Table C-2 of the EIS/EIR because it has a relatively extensive statewide distribution, from Mendocino to Ventura counties, and is a CNPS List 4 species. It was not considered sufficiently rare to be evaluated. See the response to comment C-11 for more discussion of why such species were not included.

California hibiscus was not designated as a covered species under the HCP/NCCP because it is restricted to the Delta wetlands. As noted above in the discussion of Suisun marsh aster, the inventory area boundary was drawn to exclude virtually all of the Delta wetlands. While one occurrence may be found in the inventory area, as suggested by the commenter, the general lack of suitable habitat for this species in the inventory area, and consequent lack of impact to the species from covered activities, justifies not recommending it be designated a covered species or a no-take species. The species is included in Table C-2 of the EIS/EIR.

Contra Costa goldfields was designated as a no take species rather than a covered species because no extant occurrences are known in the inventory area, despite surveys of some suitable habitat (e.g., near Byron Airport). However, the species is protected as a no take species, and the plan provides further protection for vernal pools, which provide potential habitat for the species, through inclusion of adobe navarretia and covered shrimp species.

Little mousetail was not designated as a covered species because insufficient information was available concerning the historic occurrences in Contra Costa County, and concerning the species' taxonomic status. The species is currently on CNPS list 3. According to CNPS (2005) and CNDDB (2005), all known occurrences of this subspecies are in Riverside and San Diego Counties, as well as in Mexico. The extremely low probability that it occurs in the inventory area and its presence in Southern California justify not designating it as a covered species. The species is not included in Table C-2 of the EIS/EIR because it was on CNPS list 3 when the EIS/EIR was prepared, and no occurrences were documented in the Inventory Area in CNDDB (2005) or CNPS (2005) at that time. As with Suisun Marsh aster, because little mousetail is not a covered species there would be no take authorization provided by the HCP/NCCP for covered activities, so project proponents would need to mitigate for impacts to this species separately if it were found on a project site.

Rayless ragwort was not designated as a covered species because insufficient information about the plant's current occurrence in the inventory area was available. In addition, the species is not considered likely to be listed under the federal ESA or under CESA within the next 30 years, due to the fact that it is more common in Baja California. The species is included in Table C-2 of the EIS/EIR.

Livermore tarplant was not designated as a covered species because it was judged highly unlikely to occur in the inventory area, due to the lack of any documented occurrences in Contra Costa County.

In our judgment, the botanical survey work that has been conducted in the inventory area within suitable habitat for this species is sufficient to conclude that the species is unlikely to occur there. Therefore, the species was not designated as a covered species. The species was not included in Table C-2 of the EIS/EIR because no occurrences are documented within the Inventory Area. However, if the species were found in the inventory area, it would still be protected under CEQA, and applicants would have to meet CEQA requirements to avoid, minimize, and mitigate any impacts to the species. If the species were to become listed in the future and found in the inventory area, the Implementing Entity may wish to consider an amendment to the HCP/NCCP permits to add this and potentially other species.

Caper fruited tropidocarpum was designated a no-take plant species because it is presumed extirpated from the inventory area, and the likelihood of discovery of new populations is low. If a new population of this species were found, its protection would be of the highest importance for conservation of the species, and no take would be permitted. Therefore, it would be inappropriate to designate caper fruited tropidocarpum as a covered species, as such a designation would involve allowing take within the permit area.

Revisions to the HCP/NCCP

The scientific name of hearts scale has been corrected. The status of Mount Diablo buckwheat in Table 3-7 has been corrected to 1B. The status of little mousetail in Table 3-7 has been corrected to List 3 (from 1B).

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