

Comments by California Department of Fish and Wildlife
Habitat Conservation and Planning Division, South Coast Region 5
March 11, 2013

SECTION 1.

Page 1: SEATAC Definition

Please consider the following definition for SEATAC: “The Significant Ecological Area Technical Advisory Committee, an expert advisory committee which assists the Department of Regional Planning and the Regional Planning Commission in their administration of Part 25 of Chapter 22.52.

22.52.2600 Purpose.

Page 3, Section C states: “Prevent impacts to biological resources which would compromise the conservation of the County’s biological diversity by affecting either the size or the connectivity of an SEA such that species populations of significance, as described within that SEA’s Description within the General Plan, become unsustainable.”

Comment: The use of the word “size” as a threshold is too narrow. There should be other examples of SEA degradation resulting from adverse development impacts. One example would be using degradation of habitat quality. The SEA may remain the same size but the quality of habitat may continue to degrade resulting in loss of SEA function and downgrading the area to an Ecological Transition Area as defined by the County.

22.52.2610 Definitions.

Page 5, Section H states: “SEA Developed or Disturbed Areas Map” means the map maintained by the Department of Regional Planning that identifies all developed or disturbed areas within SEAs prior to the effective date of the ordinance establishing this Part 25 and all areas within SEAs subsequently approved for development or ground disturbance pursuant to this Part 25.”

Comment: Disturbed areas may have high biological value. This map should not imply lesser ecological value without a case by case evaluation of the habitat quality by SEATAC.

Page 5, Section J states: “SEA Habitat Linkages and Wildlife Corridors Map” means the map maintained by the Department of Regional Planning that includes habitat linkages and wildlife corridors referenced in this Part 25.”

Comment: Wildlife linkages and corridors are poorly understood and continue to be defined as new information becomes available. It is useful to have a map of known areas but this map should not be used as a definitive planning tool.

General Comment: Replace California Department of Fish and Game with California Department of Fish and Wildlife where referenced throughout the document.

Page 5: 22.52.2620 Applicability

Comment: Include agricultural activity as a ground disturbance activity under Applicability. See attached CDFW letter to LA County Dept. of Regional Planning on this subject.

Page 7, Section E, describes exceptions, and states: “ Any ground disturbance, use or project designed such that the entire footprint of the ground disturbance, use or project, including construction activities, storage, Fuel Modification Zones, and related off-site and off-site improvements such as grading, roads, sewer lines, water lines, and drainage facilities, is located outside of the SEA.”

Comment: Some provisions for maintaining SEA buffers need to be included. Will Ecological Transition Areas be reviewed to prevent adverse impacts to adjacent SEAs?

Page 5, Section H, describes exceptions and states: “Any of the following activities required, requested, or permitted by a governmental agency: 1. Removal or thinning of vegetation for fire safety;

Comment: Did the County of Los Angeles Review the Board of Forestry's Vegetation Treatment Program Draft PEIR? This would allow thousands of acres of fuel reduction within the County. It is unclear how much specific impact analysis under CEQA will be required by private and local government agencies performing fuel clearing projects under this PEIR. It could have major impacts to SEAs if no further reviews are required. See attached CDFW comment letter regarding this subject.

Page 5, 22.52.2640 Development Standards.

General Comment: Development within flood plains should be discouraged and/or subject to review to assess biological impacts and public safety/infrastructure risks. It is often risks to public safety, buildings and associated infrastructures requiring protection from flooding that drive habitat alterations that often negatively impact biological resources.

Page 9, Section E2, Fuel Modification Zones states: “New structures or infrastructure requiring Fuel Modification Zones shall not be located in such a way that any portion of the required Fuel Modification Zone will include dedicated open space areas on the lot or parcel of land or on adjoining or adjacent lots or parcels of land. In addition, such structures or infrastructure shall not be located in a way that any portion of the required Fuel Modification Zone will include undisturbed natural areas on adjoining or adjacent lots or parcels of land, if possible.”

Comment: This section implies that fuel modification zones may include disturbed natural areas. Disturbed natural areas may provide habitat for special status species and support jurisdictional drainages and so should be evaluated on a case by case basis for planning purposes.

Page 10, Section H, Habitat Linkages states; “New ground disturbances may not encroach upon a habitat linkage identified on the SEA Habitat Linkages and Wildlife Corridors Map and identified during the biologist site visit required by Section 22.52.2650.B.1.”

Comment: Wildlife linkage/corridors are poorly understood for many areas. Published information on known linkages and corridors should be considered a baseline from which to make planning decisions. However there needs to be a mechanism to include the latest current information that can be made available for adaptive management planning purposes in addition to use of a existing SEA Habitat Linkages and Wildlife Corridors Map that may not be revised for many years. This map should be updated annually and this should be a requirement in the SEA Ordinance.

Comment: There should be provisions to prevent the encroachment of light, noise or other disturbances that would reduce the function of a habitat linkage.

Page 10, Section I, Wildlife, Corridors, states: “New ground disturbances may not encroach upon a wildlife corridor identified on the SEA Habitat Linkages and Wildlife Corridors Map and identified during the biologist site visit required by Section 22.52.2650.B.1. For the purposes of this subsection I, encroachment is defined to occur when the area of ground disturbance, plus required Fuel Modification Zones related to such disturbance, would narrow the width of the wildlife corridor to fewer than 200 feet at any point along the wildlife corridor.”

Comment: A 300 foot width for a wildlife corridor is not adequate for many species. Where did this number come from? 1000 feet should be the minimum width for a wildlife corridor or at least quantify (using best available science on this subject) on a case by case basis depending on what species are expected to utilize the corridor.

Page 10, Section J, Species, states: "When any ground disturbance, use, or project may encroach upon a likely to occur species of special status identified in the SEA's Description in the General Plan and discovered during the biologist site visit required by Section 22.52.2650.B.1, such ground disturbance, use or project shall not impact an area exceeding 50 percent of the habitat area for the species of special status on the lot or parcel of land."

Comment: This is not scientifically defensible. This should be species specific.

Section K, Water Resources

Page 11, Section K.1 states: "Following the biologist site visit required by Section 22.52. 2650.B.1, the applicant shall prepare a map identifying water resources, including the width, depth and location of all natural watercourses and artificial drains or conduits for the drainage of storm water located on the lot or parcel of land as well as any natural watercourses on adjoining lots or parcels of land."

Comment: Include wetlands such as springs, seeps, ponds, lakes as water resource.

Page 11, Section K.1.3(b): Buffers are described for various sizes of marshes springs and springs and as being measures from the outer edge of saturated soil around water resources.

Comment: Buffer widths as proposed should be minimum and determined on a case by case basis based upon available cited scientific literature, special status species' needs, and type of proposed development and land use stressors. Buffers should be measured from the outer edge of the vegetative community influenced by the water source regardless of vegetation type or from the outer edge of the saturated soil, whichever is greater.

Page 11, Section K.3(c): Buffer are described for riparian resources along water courses

Comment: Buffer widths as proposed should be minimum and determined on a case by case basis based upon best available scientific literature, special status species' needs, and type of proposed development and land use stressors. Buffers should be measured from the outer edge of: the saturation zone; the vegetative community influenced by the water source regardless of vegetation type; of the banks created by past high water events, whichever is wider. For floodplains supporting braided channels, buffers should be calculated from the outer edge of: the vegetative community influenced by the water source regardless of vegetation type; the outermost banks of braided channels within the floodplain; or the saturation zone, which ever is greater.

22.52.2650 Permitted Uses.

Page 12, Section A. 2 states: “Any use or project designed such that the entire footprint of the use or project, including all ground disturbance, construction activities, storage, Fuel Modification Zones and related on-site and off-site improvements, is located within developed or disturbed areas identified in the SEA Developed or Disturbed Areas Map, subject to the development standards provided in Sections 22.52.2640.A, 22.52.2640.B, and 22.52.2640.C;”

Comment: See comment above for 22.52.2610 Definitions, Section H.

Page 13, Section A.3. and A.4. explains that previously approved projects with expired permits will be subject to Section 22.52.2640;

Comment: Please explain further what Section 22.52.2640 conditions. If the new proposed SEA Ordinance standards are more protective to biological resources will projects previously approved with expired permits be head to a lesser standard?

Page 14, Section B.2., Biologist Site Visits states: “ When instances of an observed or likely to occur species of special status officially listed by the State or Federal Governments as Endangered, Threatened or Rare are discovered during the biologist site visit, the application shall be referred to the California Department of Fish and Game and the applicant shall comply with all relevant State and Federal laws and obtain all necessary State and Federal permits.”

Comment: This section should be consistent with the California Environmental Quality Act guidelines that address significance determinations for projects subject to CEQA. Adverse project impacts to State and Federally Threatened or Endangered and/or Candidate species and state fully protected species are considered significant under CEQA (CEQA Guidelines Sections 15380(b)(c)). CEQA provides protection not only for state and federally listed species, but for any species including but not limited to California Species of Special Concern and plant species which can be shown to meet the criteria for State or Federal listing (CEQA Guidelines Sections 15380 (d), 15065 (a)). This includes Lists 1A, 1B and 2 of the California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California. Those lists consist of plants that, in a majority of cases, would qualify for listing.

Comment: This section should also be consistent with the draft SEA Ordinance in section 22.52.2670 SEA Conditional Use Permit Review, C.1.(c) SEA CUP Criteria which states “ The project or the construction activities accompanying the project may result in adverse effects to species listed in the SEA’s description in the General Plan, or to species identified as candidate, sensitive, or special status species by the California Department of Fish and Game or the United States Fish and Wildlife Service;”. The California Department of Fish and Wildlife considers California species of special concern as special status species.”

22.52.2660 Uses Subject to SEA Conditional Use Permit.

Page 14, Section A states: “The following uses shall require an SEA Conditional Use Permit: A. Any ground disturbance, use or project that is not otherwise permitted by Section 22.52.2630, including development of new single-family residences on two or more lots or parcels of land in a coordinated effort, regardless of the ownership of the involved lots or parcels and regardless of whether the developments are applied for concurrently or through multiple successive applications;”

Comment: Why was the threshold set at two or more parcels? A single-family home built on one parcel that supports special status species, water resources, or a threatened vegetative communities would not be subject to a SEA Conditional Use Permit. That could lead to a cumulative impact to the SEA degradation over time and should be discouraged.

22.52.2670 SEA Conditional Use Permit Review.

Page 21, E.2.(e), Open Space Requirements for Type B SEA CUP states: “If no lot or parcel of land may be acquired within the same SEA because all lots or parcels of land within that SEA have been developed or preserved as open space, and if at least 80 percent of that SEA has been permanently dedicated as open space remaining in an natural condition or restored to a natural condition, open space may be provided in areas within the nearest adjacent SEA. Areas within the nearest adjacent SEA shall be prioritized in the order provided in subsections E.2.b through E.2.d above.”

Comment: Does this also apply if there are no willing sellers of potential mitigation land within an impacted SEA?

Page 21, E.4.(a) Open Space Use and Design Requirements, states: “Required open space shall remain undisturbed in a natural condition. Notwithstanding any applicable provisions in Section 22.56.215, no improvements shall be allowed within open space required by either subsection E.2 or E.3 above.”

Comment: Sometimes is it necessary to erect fences, signs, or other measures to restrict access for protection of the desired resource on natural open space. This may be difficult if restrictions are too broadly worded in conservation easements. Please define improvements.

Page 23, E.6.a(3), Open Space Ownership and Management Requirements explains that open space may be dedicated to a Homeowners Association (HOA).

Comment: HOAs should not be treated as a separate entity here. Most HOAs are considered non profit organizations and must comply with Government Code Section 65965 for a non-profit land conservation organizations.

Memorandum

Date: February 25, 2013

To: Mr. George Gentry
Executive Officer
State Board of Forestry and Fire Protection

From: Sandra Morey
Deputy Director
Ecosystem Conservation Division

Subject: **Draft Programmatic Environmental Impact Report for California Board of Forestry and Fire Protection's (BOF) Vegetation Treatment Program**

Thank you for the opportunity to comment on the Draft Programmatic Environmental Impact Report for California Board of Forestry and Fire Protection's (BOF) Vegetation Treatment Program, October 30, 2012 Draft.

The California Department of Fish and Wildlife (CDFW) has jurisdiction over the conservation, protection, and management of fish, wildlife, and habitat necessary for biologically sustainable populations of those species (Fish & G. Code, § 1802). CDFW also has regulatory authority under the California Endangered Species Act (CESA), Native Plant Protection Act, the Natural Community Conservation Planning Act, and other provisions of Fish and Game Code that afford protection to California's fish and wildlife resources.

The proposed Vegetation Treatment Program's (VTP) emphasis is to lower the risk of catastrophic wildfires on non-federal land by reducing hazardous fuels. Other goals include controlling unwanted vegetation including invasive species, improving rangeland for livestock grazing, and improving fish and wildlife habitat. This proposed VTP appears to support site-specific projects that would affect existing habitat in forest and rangelands using prescribed fire, mechanical clearing, herbicides, and other treatments. This plan considers that up to one third of the state (38 million acres) is available for treatment.

CDFW offers the following general comments and recommendations for the above referenced draft Programmatic Environmental Impact Report (PEIR). We provide additional and more detailed comments in the attachment to this letter (Attachment A).

Shrublands and Desert Shrub-type Habitats: The Final PEIR for the VTP should more thoroughly address the extensive acreage of native shrublands and desert shrub-type habitats within California and their vulnerability to potential vegetation treatment impacts. The document should also include a broader ecological perspective in managing episodic stream ecosystems in dryland environments.

Consistency with Existing Plans: The Final PEIR for the VTP should reference and be consistent with existing applicable plans such as the State Wildlife Action Plan, various Cooperative Fire Protection Agreement and Operation Plans, and Natural Community Conservation Plans (NCCP).

Vegetation Analysis, Mapping, and Standardization: CDFW has worked closely with local, state, and federal agency partners to develop the Second Edition of *A Manual of California Vegetation* to provide a standardized, floristic-based systematic classification and description of vegetation in California (Sawyer et. al, 2009). The method of vegetation classification used in this manual represents the vegetation classification standards for large-scale vegetation maps recently adopted by the State of California. These state standards meet the National Vegetation Classification System standards followed by federal agencies. Use of this vegetation classification system will help better determine the extent of common, rare, and unique habitats in need of protection and allow for a more comprehensive planning effort.

Subsequent Environmental Review: CDFW is concerned that forthcoming projects may propose to query the California Natural Diversity Database (CNDDDB) or the Biogeographic Information and Observation System (BIOS) in lieu of on-the-ground general biological surveys. Although these databases provide useful information for determining which species are potentially present on a site, they are not an appropriate substitute for project level general biological surveys. It is not clear what criteria would determine the need for surveys.

Projects conducted under the final PEIR within habitat occupied by species listed as threatened, endangered, or candidate for listing under CESA would require further consultation with CDFW to determine if a permit would be required prior to project initiation due to the potential for the incidental take of a listed species (Fish & G. Code, § 2080 et seq.).

Seasonal Impacts: While wildlife and plant species impacts are explicitly outlined in Chapter 5, the environmental checklist does not address seasonality, nor does it outline avoidance or mitigation strategies to protect wildlife or plants during their most vulnerable life stages (Checklist 5.5- 14, 5.5- 19, 5.5- 20, 5.5- 22).

Invasive Species Management: CDFW believes removing invasive species and retaining native species should be a goal for every VTP project, not on a case-by-case basis. VTP projects should include field analysis and effective strategies to prevent invasive species from expanding into project treatment areas. Post-treatment follow-up monitoring at years 1, 5 and 10, should also be considered to address changed conditions stemming from the project and include mitigation to actually effectively control and remove noxious and problematic weeds.

Coordination with CDFW: The draft PEIR outlines coordination and CDFW's ongoing involvement with the VTP in order to achieve the VTP's goals. Although the discussion of coordination in the draft PEIR likely has its roots in the 1994 *Interim*

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Joint CDFW/Board Policy on Pre, During, and Post Fire Activities and Wildlife Habitat (Joint Policy), the draft PEIR makes no mention of the Joint Policy. The Joint Policy outlines a process to facilitate needed coordination to achieve common goals and

objectives but limits its implementation to “the extent feasible” given funds and staffing.

Finally, due to the large scale and scope of the draft PEIR crossing into multiple CDFW Regions, please include each CDFW regional office in future communications so they can be involved as the draft PEIR progresses through the CEQA and subsequent permitting processes.

If you have any questions please contact Helen Birss, Habitat Conservation Planning Branch Chief, at 916-653-9834 or Helen.Birss@wildlife.ca.gov.

Attachment

ec: Dept. of Fish and Wildlife
Helen Birss, Tina Bartlett, Jeb Bjerke, Kimberly Nicol, Scott Wilson, Curt Babcock, Cathie Vouchilas, Ryan Mathis, Paul Schlitt, Ed Pert, Neil Manji, Sonke Mastrup, Dr. Jeffrey R. Single, Jeff Drongeson,

Attachment A

California Department of Fish and Wildlife Detailed Comments on California Board of Forestry and Fire Protection Vegetation Treatment Program Draft Programmatic Environmental Impact Report

Prescribed Fire: Draft Programmatic Environmental Impact Report (PEIR) Section 5.5.3.4 describes a proposed Vegetation Treatment Program (VTP) that would “reintroduce fire into (natural) communities where fire has been excluded through past suppression or control efforts.” This proposal may not be applicable to the coastal southern California bioregion, and particularly, the shrub-dominated chaparral and coastal scrub habitats.

There is substantial evidence that the frequency of fires continues to increase in coastal southern California (USDI NPS, 2004; Keeley et al. 1999). Fire management of California’s shrublands has been heavily influenced by policies designed for coniferous forests; however, fire suppression has not effectively excluded fire from chaparral and coastal sage scrub landscapes and catastrophic wildfires are not the result of unnatural fuel accumulations (Keeley, 2002). There is also considerable evidence that high fire frequency is a very real threat to native shrublands in southern California, sometimes leading to loss of species when fire return intervals are shorter than the time required to reach reproductive maturity (Keeley, 2002). Both common and rare plant species and the habitats they provide are vulnerable to adverse impacts where fire regimes are altered.

The VTP could increase treatments across the landscape, potentially clearing habitat and replacing older vegetation stands. Expansion of invasive herbaceous species poses an additional threat to shrub-dominated communities subjected to frequent fires. Vegetation clearing projects, and burning to increase forage for livestock, often results in type conversion to low diversity annual grasslands. The draft PEIR acknowledges these threats to some degree.

CDFW is concerned that the VTP may further contribute to substantial adverse cumulative effects across the landscape through altering natural fire regimes, applying cool season prescribed burning to vegetation adapted to infrequent, dry season hot fires, and by clearing intact habitat areas that may expose them to weed invasion.

Environmental Setting/Bioregion Overview: Sections 4.1 and 4.5 provide a general discussion focused primarily on forest and rangelands within the state. There is some discussion of hardwoods and woodlands in this section. The VTP would benefit from more extensive coverage on the importance, and extensive acreage of, shrublands and desert shrub-type habitats within California and their vulnerability to potential vegetation treatment impacts.

The bioregional summaries in Section 4.1 provide maps of general vegetation; however, they are at a scale that is not useful to the reviewer. The VTP would benefit from

additional information and a summary of the environmental setting for each bioregion. Section 4.5 provides additional but limited information for each bioregion, however there is little or no discussion of the bioregional setting specific to the south coast bioregion and the presence of over 2.9 million acres of shrublands, much of which is on private lands and therefore potentially subject to the VTP.

Section 4.5.3 addresses the environmental setting relative to plant species of concern (generally) and vegetation, but more information would be useful to determine and evaluate the environmental impacts from the VTP. Knowledge of the regional environmental setting is critical for assessing environmental impacts, and special emphasis should be given to environmental resources that are rare or unique to that region and that could be affected by the VTP (Guidelines, § 15125, subd. (c)). CDFW recommends that the VTP be organized into manageable bioregions, and each bioregion should be analyzed at the programmatic level.

Consistency with NCCP/HCP Planning Efforts: A plan of this magnitude, extending through diverse and biologically rich habitats, merits a more thorough discussion regarding the potential impacts the VTP (including alternatives) could have on achieving the objectives contemplated in existing and draft Natural Community Conservation Plan/Habitat Conservation Plans (NCCP/HCP) throughout the State. The success of these plans relies on maintaining core biological resource areas and habitat linkages that are essential to the long-term biological viability of associated flora and fauna. The VTP could lead to impacts and loss of biologically sensitive lands and resources within those portions of the state with NCCPs/HCPs. CDFW recommends providing a discussion in the final PEIR to identify the VTP's potential effects (including connected actions and alternatives) on conservation strategies that are outlined within existing or draft NCCP/HCPs.

Federal and state permits for endangered/threatened species have been issued to local jurisdictions based on plan conservation levels and the configuration of conserved habitats. If those conservation levels and the locations of conserved lands are significantly altered by the VTP, then permits for the NCCP plans may have to be modified (to the detriment of conserved resources) or comprehensively re-evaluated. This could potentially affect a much broader area than just the footprint of the vegetation treatments, as these jurisdictions rely upon the permits to address take of listed species throughout their jurisdictional areas. The environmental checklist (Chapter 8) for the VTP should include an evaluation of potentially affected regional NCCPs/HCPs. A thorough analysis of the regulatory impacts of the VTP area should be included in the final PEIR.

CDFW encourages the Board of Forestry and Fire Protection (BOF) to incorporate the goals, objectives, and preserve design criteria associated with affected NCCP/HCPs into the final PEIR. CDFW recommends that alternatives that minimize adverse impacts to native vegetation communities and associated species should be evaluated and considered. This could partially be accomplished by adherence to the conservation objectives identified within approved and draft NCCP/HCPs and then applying the principal conservation strategies outlined within those plans.

Region-Specific Conservation Actions: Section 1.2 of the draft PEIR provides an introductory overview of resource management actions that have changed the structural characteristics of California forests. The discussion highlights concerns with coniferous forests and other hardwood forest/ woodland management. However, no comparable discussion was included that specifically addresses shrubland or scrub communities and management within Southern California. California's Wildlife Action Plan cites, "*Wildfire is a natural and important ecological process in the South Coast. Widespread forest management practices, as well as increase in human-caused wildfires, have altered fire regimes, in some cases causing dramatic changes in regional habitats.*" Furthermore, the Wildlife Action Plan states, "*The cause and ecological consequence of wildfires differ among the region's ecological communities.*" This important topic should be included within the introductory portion of the final PEIR and given equal attention throughout other sections of the final PEIR.

Regulatory Compliance: The PEIR should provide a more thorough analysis of the regulatory requirements of the VTP. Examples include compliance with the following:

- 1) Fish and Game Code section 1600 et seq. that is required for any substantial alteration of any river, stream or lake, including those that are episodic (e.g., ephemeral streams, desert washes) as well as perennial (flow year round). Note the bed, channel, or bank includes the floodplain and riparian vegetation when present.
- 2) The lead agency obligation to determine the direct and indirect effects of a project (CEQA Guidelines, § 15064 subds. (d)(1) & (2)), and to obtain the necessary expertise to inform those determinations, using substantive data, expert input, and site-specific analysis.
- 3) California Department of Pesticide Regulation (CDPR) with respect to buffer zones.

California Endangered Species Act (CESA): Section 4.5 cites, "*The California Endangered Species Act was enacted in 1984...*" Please correct this reference to identify the California Endangered Species Act was enacted in 1970 (Stats. 1970, ch. 1510, § 3). The current basic structure added to the California Fish and Game Code in 1984, replacing the original Act from 1970 (stats. 1984, ch. 1162, §§ 5 & 6: stats. 1984, ch. 1240, §§ 1 & 2.).

VTP Actions on State Responsibility Areas: CDFW's South Coast Region (Region 5) has a Cooperative Fire Protection Agreement and Operation Plan (dated, June 1, 2012) with CAL FIRE. This agreement describes a cooperative fire protection plan between the two agencies for CDFW lands within San Diego County (covering Wildlife Areas, Ecological Reserves, and Undesignated Lands). The Operating Plan includes key special management considerations that should be referenced within Section 2.3 (Minimum Management Requirements) of the draft PEIR. With respect to similar operating plans for CDFW lands within CDFW Regions 1 through 4 and 6, a similar acknowledgement of the key management elements for each applicable plan should be provided in the final PEIR. Furthermore, we suggest that the special management

considerations identified within all affected operating plans be carried forward into the commitment language under section 7.2 *Mitigation Monitoring Responsibility and Reporting Requirements*.

Management Actions Common to all VTP Alternatives: CDFW encourages continuing coordination on wildlife-related issues; including the BOF considering the *California Wildlife: Conservation Challenges, California's Wildlife Action Plan* within the planning framework of the final PEIR. This tool evaluates stressors on wildlife and provides measures to ensure diverse and abundant wildlife populations in the future. The adaptive management guidance provided in the *Wildlife Action Plan* cites the importance of continuing collaborative efforts between federal, state, and local agencies, along with nongovernmental conservation organizations to effectively protect and manage sensitive species and important wildlife habitat.

Vegetation Classification, Fire Characteristics, and Mapping: The vegetation classification and mapping used in the draft PEIR should be updated using the Second Edition of *A Manual of California Vegetation*. California Fish and Game Code was revised in 2007 to include Section 1940, which instructs CDFW to adopt vegetation mapping standards for the state (Fish & G. Code, § 1940 subd. (a); "The Department of Fish and Game shall undertake the development of a vegetation mapping standard for the state"). CDFW has worked closely with our local, state, and federal agency partners to develop the Second Edition of *A Manual of California Vegetation* to provide a standardized, floristic-based systematic classification and description of vegetation in the State of California (Sawyer et. al, 2009). The method of vegetation classification used in this manual represents the vegetation classification standards for large-scale vegetation maps recently adopted by the State of California. These state standards meet the National Vegetation Classification System standards followed by federal agencies. Use of this vegetation classification system will help better determine the extent of common, rare, and unique habitats in need of protection and allow for a more comprehensive planning effort.

The draft PEIR should reference and utilize the 1995 *Manual of California Vegetation* (Sawyer and Keeler-Wolf, 1995), and provide current information from the 2009 Second Edition of the Manual. The Second Edition contains a wealth of specific information on the fire characteristics of numerous alliances and associations- it includes both life history traits for the principal species which make up a given alliance, and specific fire characteristics of that alliance, where known. The Second Edition includes extensive scientific literature citations, including references pertinent to fire ecology.

CDFW recommends that alliance-based mapping be utilized at the project and regional level for all proposed vegetation treatment projects. A qualified botanist will be needed for each project to characterize affected vegetation, assess potential impacts, and modify treatments as appropriate. Site-specific floristic evaluations, consistent with the manual, are also needed for subsequent environmental review at the project level. Regional tracking of individual projects is also essential to ensure cumulative impacts are adequately addressed.

Subsequent Environmental Review: The draft PEIR section 5.5.2 and 5.5.3 provide a broad analysis of the potential direct impacts to vegetation and wildlife resources that could result from the proposed VTP. The draft PEIR provides a very limited analysis of the potential for indirect impacts to specific special status species. CDFW believes that the approach described in the draft PEIR (page 5.5-12: Approach to Bioregional Analyses) may be appropriate at program level analysis; however, subsequent project-level analysis will be necessary to determine the potential for both direct and indirect impacts to special status flora and fauna. The draft PEIR partially recognizes the need for subsequent project specific analysis in Section 2.2 (Landscape Available to be Treated: #5) and Section 2.3 (Minimum Management Requirements (MMR): #5) of the draft PEIR.

CDFW is concerned that forthcoming projects may be proposing to use database searches (CNDDDB, BIOS) in lieu of on the ground general biological surveys. Although MMR #5 does state that surveys may be required, it is not clear what criteria would determine the need for surveys. Although these databases provide useful information for determining which species are potentially present on a site and which species-specific surveys should be performed, they are not an appropriate substitute for project level general biological surveys. The final PEIR should provide clear guidance for individual VTP projects including the necessity for subsequent environmental review and site-specific biological surveys. This includes ensuring plant surveys will be floristic (i.e., Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, DFG, November 24, 2009).

MMR#5 describes a process through which the wildlife agencies are notified during the project-scoping phase and asked for comments and recommendations. This condition should be modified to indicate that the lead agency for a Project shall modify the project design and/or incorporate mitigations recommended by the wildlife agencies stemming from those comments and consultations. This measure largely emphasizes species-based analysis, and we recommend it also include vegetation, habitat, watershed, and soils that could potentially be impacted by project activities. Project applicants could be private landowners or other parties who are typically not qualified to determine direct and indirect project effects to biological resources. It is the obligation of the lead agency under the CEQA to determine the direct and indirect effects of a project and to obtain the necessary expertise to inform those determinations, using substantive data, expert input, and site-specific analysis.

Typical Treatments to Meet VTP Goals: Section, 1.7, 2.5, and 5.5.4.4 discuss wildland fire and suppression including the use of fuel breaks. Excerpted from *Comparing the role of fuel breaks across southern California national forests*, Syphard, A.D. et al, 2011:

“[T]his study strongly supports the notion of constructing fuel breaks along the wildland-urban interface where firefighters will have better access to the fuel breaks, and where the fuel breaks will provide an immediate line of defense adjacent to homes that are at risk. The case studies from all four national forests demonstrate that fuel breaks will not stop fires without firefighter presence.

Therefore, constructing fuel breaks in remote, backcountry locations will do little to save homes during a wildfire because most firefighters will be needed to protect the wildland-urban interface, and fires will not be stopped by those fuel breaks that are located farther away. Finally, because access to fuel breaks was consistently improved when vegetation structure was favorable, this study suggests that maintaining fuel breaks in strategic locations may be just as important as constructing new fuel breaks.”

CDFW discourages the creation of new fire breaks or fuel modifications zones in remote areas as these fire breaks serve as conduits for the introduction of non-native and invasive plant species into areas that currently may not have weed problems. Additionally, these fire breaks provide vehicular and human access into areas that may have been inaccessible to humans prior to the fire break, thus creating secondary impacts such as renegade trails, trash, illegal collecting of wildlife (amphibians, reptiles, raptors, etc.), poaching, and degradation of areas that were previously pristine wilderness. The resource cost of placing any fire break should be evaluated in the context of the net benefits for communities (natural or anthropogenic) and the accessibility of the fire break to firefighter personnel. In some instances a strategically placed fire break could help protect highly sensitive species, such as cactus stands supporting cactus wrens, or critical locations of some plant populations in as much as they are meaningful and serviceable. The development of individual fire management plans should be evaluated within the context of the applicable NCCP reserve system.

Section 4.16 (Hazardous Material and Other Concerns) states “*VTP practices may involve the application of fire retardants to control fire.*” Section 2.5 (Detailed Description of Treatments) should discuss whether fire retardants are being considered as a preemptive VTP treatment measure for wildland-urban interface areas. CDFW is aware of residential property owners in San Diego County who have requested applying a Phos-Chek fire retardant to vegetation along property perimeters (i.e., prior to start of fire season). The primary constituents of these products are ammonium salts, consequently the retardant acts similar to a chemical fertilizer. The ammonia and phosphorus are the constituents of greatest concern in terms for potential ecotoxicity to aquatic organisms. These products are effective for a season-long duration; however, they will wash-off in the rain. The retardant may also cause foliage to wither and turn brown. In those instances where CDFW has been notified of such applications, we have cautioned against their application. We have also emphasized that a minimum of a 200-foot setback be factored in for application near any drainage areas (including ephemeral) and cautioned their application where fine fuels (e.g., annual grasses) occur. The final PEIR should include supplemental discussion on whether this issue was raised during project scoping and whether they were considered to be evaluated as part of the VTP.

Vegetation Treatments for Rangeland Improvements: In the south coast bioregion, the hazardous fuels targeted by the proposed VTP constitute native habitats that are often shrub-dominated and support a diverse array of both common and uncommon species of plants and animals. The draft PEIR generally treats these shrub-dominated plant communities as “rangelands,” even though they provide low levels of suitable

forage for cattle. Due to its low value for cattle forage, chaparral and coastal scrub areas have been identified as being most useful for conserving watersheds and as deer forage (Sampson and Jespersen, 1963).

Shrublands have historically been viewed as a general impediment to livestock movement and as crowding out grasses and forbs favored by grazing livestock, particularly cattle (Sampson and Jespersen, 1963). The replacement of shrublands with grasslands, resulting in type conversion, has occurred extensively throughout California for several hundred years, and is frequently the end result of vegetation management treatments to “improve” rangelands. Diverse shrublands have been intentionally and unintentionally converted through repeated episodes of burning and livestock grazing, and are often replaced by lower diversity grasslands typically dominated by non-native Mediterranean grasses and forbs. Introduction of livestock onto recently burned shrublands further exacerbates habitat fragmentation, impairs shrubland recovery, and reduces watershed integrity, increasing runoff and exacerbating downstream flooding. Cumulatively, past type conversion of shrublands to annual, herbaceous vegetation has affected extensive areas in the south coast bioregion, and projects proposed under the VTP could further contribute to type conversion and associated loss of biodiversity through continuing these historic practices.

The VTP does not provide a grazing-free recovery period for rangeland improvements in shrub-dominated habitats and woodlands. The adverse impacts of livestock grazing on recovering treatment areas should be evaluated in the final PEIR. The first several years following wildfires or prescribed fire treatments are critical to the successful recovery of short-lived native herbaceous and perennial vegetation. Chaparral and coastal scrub vegetation supports a unique post-fire herbaceous flora, typically over a 1-3 year period following fire (Westman, 1979). Some of these species are pyrophytic endemics, and persist only as seed bank in between infrequent fire events. Obligate seeding shrubs must reproduce via seed from the seed bank. Absent a recovery period, they may fail to become established and ultimately be eliminated from treated stands. Livestock grazing during the recovery period can also damage species with basal reshoots. CDFW recommends that a minimum 3-year recovery period with no livestock grazing be provided for any project where shrublands and woodlands are treated in areas accessible to livestock. Extended recovery periods may be necessary if post-treatment monitoring suggests additional recovery time is needed or if substantial drought conditions occur during the recovery period.

Increased Fire Frequency: Fire regimes in the south coast bioregion are currently driven by human caused ignitions and many habitat areas are at risk of experiencing frequent fires leading to the potential for vegetative type conversion and subsequent loss of biodiversity. Conditions favorable for prescription burning often result in out-of-season burning when conditions are moister, cooler and fuel moisture levels are higher. Since chaparral and coastal scrub are adapted to a regime of infrequent, relatively intense, dry season fires, imposition of low intensity cool season fires through prescribed burning can produce undesirable ecological effects and damage vegetation.

Abundant evidence exists that high fire frequency is a very real threat to native shrublands, sometimes extirpating species sensitive to short fire return intervals (Keeler-Wolf, 1995; Keeley, 2002; USDI NPS, 2004). The fire return intervals in the Santa Monica Mountains, for instance, which have been carefully analyzed, threaten the persistence of shrublands that have dominated this area (NPS, 1994); vegetation type conversion in mixed chaparral in the Santa Monica Mountains has been documented after a series of fires (Fabritius and Davis, 2000 *In* USDI NPS, 2004). CDFW recommends that treatments proposed under the VTP be limited to areas adjacent to the wildland-urban interface, in order to minimize the amount of landscape exposed to unnaturally high fire frequencies.

With regard to shrublands in the south coast bioregion, (including chaparral, coastal scrub and maritime chaparral), CDFW recommends the VTP be modified to ensure that moderate to old aged stands are conserved across the landscape, and protected from mechanical treatments or prescribed fires. Any active treatment should be consistent with the fire history, frequency and conditions for which the key species comprising these habitats are adapted.

Invasive Species Expansion in Project Treatments: The draft PEIR analyzed the potential for adverse impacts stemming from a variety of proposed vegetation treatments. The invasive species discussion in the draft PEIR generally recognizes that invasive weeds are capable of spreading into areas treated with prescribed broadcast fire, controlled burns, fuel break construction, and maintenance, mechanical and herbicide clearing. Section 5.5.4.4 states that although the Proposed Program creates the indirect effect of encouraging the spread of invasive species, much of the potential impact is “*balanced by the VTP projects designed to reduce or eradicate invasive species.*” While there are certainly benefits to undertaking effective vegetation treatments specifically designed to control invasive weeds, a control project in one location does not offset or mitigate for weed expansion stemming from implementing a project in another geographic location. The VTP offers no specific mitigation aimed at identifying, controlling, reducing or eliminating non-native invasive species likely to expand following habitat clearing projects. There is therefore potential for serious adverse impacts at most, if not all, potential treatment locations.

Data and Assumptions/ Approach to Statewide Analysis: The statewide analysis discussion (sec. 5.5.2.3.1) states, “*Effects of fuel reduction on wildlife depend on the specific ecological requirements of individual species and thus are difficult to generalize, especially in a treatment area as large and complex as that considered here.*” CDFW encourages that a further comprehensive project-by-project analysis be conducted by each lead agency carrying out projects under the VTP. It is important that each analysis include further bioregion-specific wildlife resource inventory information, define specific impacts to those resources, and propose avoidance and mitigation measures to be implemented for all subsequent projects carried out under the VTP. In order to maximize CDFW’s ability to provide lead agencies further protective measures for wildlife resources, early consultation with CDFW should be conducted through the CEQA process for each forthcoming project

Bioregion-Specific Effects of Implementing the Program Alternatives: The species accounts section for prescribed burns (sec. 5.5.2.6), states "*Species such as California tiger salamander...are expected to benefit indirectly from treatment, which will help maintain grasslands by preventing encroachment of woody vegetation.*" Please provide supplemental discussion, including any supporting science, for that conclusion.

Desert tortoise (*Gopherus agassizii*), least Bell's vireo (*Vireo bellii busillus*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), and tri-colored blackbird (*Agelaius tricolor*) should be included within the Mojave bioregion specific effects analysis section. Specific to the South Coast Bioregion, least Bell's vireo, southwestern willow flycatcher (*Empidonax traillii extimus*), golden eagle (*Aquila chrysaetos canadensis*), Cooper's hawk (*Accipiter cooperii*), white-tailed kite (*Elanus leucurus*), quino checkerspot butterfly (*Euphydryas editha quino*), western spadefoot (*Spea hammondi*), arroyo toad (*Bufo californicus*), Western pond turtle (*Emys marmorata*), flat-tailed horned lizard (*Phrynosoma mcalli*), and American badger (*Taxidea taxus*) should be discussed in the effects analysis section (sec. 5.5.2.6).

Mitigation measures are lacking in the draft PEIR for special status species described within the Mojave and South Coast Bioregion. Occurrences of special status species can be quite localized and may consist of metapopulations that are important to species persistence within a specific bioregion. The direct and cumulative loss of these populations or portions of these populations may be significant. Consulting the CNDDDB and BIOS may not provide full coverage of species presence for the purposes of impact assessment, avoidance, and mitigation analysis. Mortality (take) of special status species including species listed under CESA may result from implementation of the VTP. Take may result from direct incineration of species of low mobility and/or during the breeding season, crushing of shallow burrows by equipment, and other indirect disturbances performed during important life stages of wildlife within the work zones. Projects conducted under the final PEIR within habitat occupied by species listed as threatened or endangered under CESA may require an Incidental Take Permit (ITP) prior to project initiation. Impacts to CESA-listed species and other special status species should be considered on a project-by-project basis in consultation with CDFW. CDFW recommends avoiding habitat occupied by special status species during project activities.

The environmental impact analysis for vegetation (sec. 5.5.3.5) contains a series of bioregional tables which, in the case of the south coast bioregion, lists seven special status (rare) plants and one natural community described as having the most element occurrences in the bioregion (Table 5.5.3.20). The assumption presented is that the species and habitats in these tables are presumably the most likely to be adversely affected by the proposed VTP at the programmatic level. We recommend including a discussion of the information in these tables in the PEIR.

Table 5.5.3.20 appears to contain erroneous information. The table lists the state and federally endangered slender-horned spineflower (*Dodecahema leptoceras*) (an endangered genus) and is shown as having 913 element occurrences. A 2011 CNDDDB query showed only 35 element occurrences, including presumably extirpated

occurrences. The table indicates that Southern Sycamore Alder Riparian Woodland has 1103 element occurrences, when the 2011 CNDDDB indicates there are 230. Please provide further explanation to occurrences reported and revise final PEIR accordingly.

Program Monitoring: Chapter 7.0 describes a program-level monitoring effort emphasizing baseline inventory, implementation, effectiveness, and validation monitoring. CDFW agrees that this type of monitoring is important for evaluating the success of the overall statewide program. However, the PEIR does not address the need to monitor the results of individual project treatments and the recovery of treated vegetation stands. Furthermore, it states that CAL FIRE will, each year, field review a “sample” of burned projects to assess the results of treatments and wildfire effects. The proportion of projects that would be sampled is not identified. CDFW recommends that all site-specific projects receive post-treatment field evaluations to determine that project objectives have been met. It is also critical that site specific monitoring occur in order to document habitat and vegetation recovery, and identify invasive species issues that need follow up control. We recommend treatment areas be monitored at year 1, 5 and 10, following treatment.

VTP Mitigation Measures: In section 5.5.2.1, Fish and Game code 3505.5 is incorrectly identified. Fish and Game Code sections 3503 (nests and eggs) and 3503.5 (birds of prey, nest, eggs) should be inserted as a correction.

Section 5.5.2 and 5.5.2.1 recognize the need to comply with the Migratory Bird Treaty Act (MBTA) and Fish and Game Code section 3503.5 (corrected), however, no specific mitigation measures were provided to ensure compliance with these state or federal wildlife protection laws. CDFW recommends that the Mitigation Monitoring and Reporting conditions be amended to include provisions for avoiding project work during avian breeding seasons to avoid the take of birds or eggs, and provisions for how work might proceed, if necessary, during the breeding season with the use of a qualified biologist to conduct appropriate surveys, document findings, recommend adequate buffers, and use biological monitors, in consultation with CDFW.

Mitigation Measure 5.5.3-1 directs that treatment prescriptions mimic natural fire regimes, but this measure would apply only to “fire adapted special status plants.” This measure should be modified to ensure that all vegetation stands where treatments are proposed will be managed consistent with natural fire regimes and utilize the best available species-specific and habitat-specific scientific information. This measure indicates that a mosaic of “old” and “young” stands would be created with “diverse habitat structures.” There is little or no discussion of what constitutes “old” stands with regard to southern California shrublands. This measure should be modified to address intermediate aged stands as well, which provide habitat components essential for a variety of wildlife species.

Mitigation Measure 5.5.3-2 directs that cool season prescribed fire timing and ignition techniques be used in desert shrub habitats with well-established stands of invasive grasses (e.g., cheat grass), in order to prevent type conversion. This measure and associated discussion pertaining to this subject need further development, as it is not

clear if the purpose of cool season burning is to control the invasive grasses. In addition, there is insufficient information provided as to the effectiveness of such cool season burns in protecting native desert shrubs and native herbs.

Mitigation Measure 5.5.3-3 states, “*Mechanical treatment shall be avoided to the greatest extent possible in special status plant communities with a state rank of 3.2 or lower. If mechanical treatment cannot be avoided, impacts will be mitigated on an acre-for-acre basis by enhancing or restoring the same community type elsewhere in the region.*” This ratio could be appropriate for addressing temporary impacts; however it may not be adequate depending on the specific type of community or importance to the local landscape. A discussion should be included of mitigation for impacts to occupied and unoccupied suitable habitat for listed species.

Mitigation Measure 5.5.3-4 states, “*A 50’ exclusion zone shall be established around vernal pools*”. A 50-foot setback may be suitable in some cases (e.g., individual road ruts pools); however, actual buffer widths should be based site-specific factors, such as pool flora/fauna and associated vernal pool complex/watershed characteristics. CDFW recommends the final PEIR provide the criteria by which the buffer width will be determined. The mitigation measure should be modified to require consultation with CDFW and the U.S. Fish and Wildlife Service with respect to determining appropriate setbacks.

Mitigation Measure 5.5.3-5 indicates that a qualified biologist or CDFW be consulted during project development when treatments are proposed in maritime chaparral (identified as a rare natural community prescribed for special treatment in the draft PEIR). This measure should be modified to address all rare natural communities and declining common vegetation types supporting key species adapted to infrequent dry season fires. Any proposed treatments should be evaluated based on current science and specific characteristics of the local and regional project area and include follow up monitoring. We recommend using a regional interdisciplinary team approach to ensure adequate review and planning. Adoption of appropriate treatment alternatives, including no treatment, is warranted where alliances and associates are rare, declining, or particularly vulnerable to adverse effects from vegetation treatments.

Mitigation Measure 5.5.4-3 states “*Prior to implementing any project which could create conditions favorable to invasive species, CAL FIRE/applicant shall contact the county Agriculture Department and any local groups concerned with noxious weed control, to ascertain the location and extent of known populations of non-native invasive species, which could provide a seed source in the project area.*” This measure offers no mitigation actions or commitments for avoiding or compensating for an activity. CDFW recommends that all VTP projects include on the ground assessments for existing invasive species, and include analysis and effective strategies for preventing them from expanding into project treatment areas. Post-treatment follow-up monitoring at years 1, 5 and 10, should also be considered to address changed conditions stemming from the project and include mitigation to effectively control and remove noxious and problematic weeds. The VTP should include a funded weed management program and trained staff to implement the program at the regional project level. Where invasive species like

Mediterranean annual grasses and forbs are present near proposed treatments, prescribed fires in intact habitats adjoining areas supporting these species should be minimized.

Water Resources and Water Quality Section 4.7. Impacts associated with changes in water quality properties may be as important as increased sediment yields. For example, phosphorus loads are thought to increase after prescribed wildfires just below wildfire levels. Nitrate-N concentrations peak slightly higher with a wildfire, but within a few months appear to return to normal levels. Prescribed burns lengthen the duration of nitrate-N leaching from the soil, thereby contributing more overall pollution to the watershed (Meixner, 2004). An important management consideration should be to evaluate fire effects on chaparral ecosystem processes, such as identifying variables in terms of short and long-term recovery (associated nitrate cycles) and implications of fire suppression, prescription, and management on catchment nutrient export (Meixner et al. 2003).

The list of principal rivers in the program area by region (Table 4.7.2) should be amended to include the Tijuana River. The Tijuana River watershed is divided by the U.S. and Mexico international border and is probably the most impaired watershed in San Diego County (CRWQCB 1994). The CRWQCB identifies sedimentation as a priority pollutant and should be included within Table 4.7.4 of the final PEIR.

Table 4.7.6 identified no lakes, bays, and estuaries impaired by sediment within Regional Water Quality Control Board Region 9. According to California's 2010 State Water Resources Control Board Clean Water Act Section 303(d) List/305(b) Report, 5 waterbodies within those waterbody categories are impaired by sediment. Additionally, Table 4.7.5 and 4.7.6 provides a citation to a 2010 State Water Resource Control Board reference source; however, we were unable to locate that citation for Chapter 4 – Literature Cited. Revisions should be provided where needed to address the aforementioned items.

Landscape Available to be Treated: DEIR Section 2.2; page 2-5; number 1 states:

A watercourse and lake protection zone (WLPZ) will be established on each side of all Class I and II watercourses (see Glossary for definitions) that is equal to the widths specified in the CA Forest Practice Rules, which vary between 75-150 feet on each side of Class I watercourses and from 50-100 feet on each side of Class II watercourses. WLPZs are measured by slope distance from the high water mark of the watercourse. Vegetation significant to maintenance of watercourse shade will not be disturbed within Class I and II watercourses. Vegetation within and adjacent to Class III watercourses will be retained, as feasible, to protect water quality.

Use of the Forest Practice Rules' stream definitions limits protection from heavy earth-moving equipment to watercourses where fish and non-fish but fully aquatic species are present, and implicitly allows heavy equipment operation in all other watercourses. While such an approach may be appropriate in perennial streams in temperate region

environs, it is entirely unsuited to the intermittent and ephemeral streams that comprise the majority of the streams in the drier parts of the state and that dominate the landscape in Modoc, Southern San Joaquin Valley, Mojave, and Colorado Desert bioregions. Fully aquatic species are typically absent from these dryland streams but the streams nevertheless are critical to the survival of terrestrial plant and animal species. This comment is also pertinent to Chapter 3 – Alternatives; section 3.6 subsections A and C.

CDFW recommends that the Class I through III definitions and their reliance on the presence of fully aquatic species be abandoned in this application.

Section 2.2 number 2: Heavy earth-moving equipment will not operate within the WLPZ of any Class I or II watercourse without a California Department of Fish and Game (DFG) Streambed Alteration Agreement, as indicated above except at existing or designated crossings

The above statement implies that CDFW Streambed Alteration Agreements are required for heavy equipment work in Class I and Class II streams but no such permit and/or consultation with CDFW is required for similar work in Class III streams where aquatic life is absent. The FPRs definition for Class III streams is absent from the Glossary. Fish and Game Code section 1600 et seq. applies to ephemeral streams. DFW recommends that the VTP indicate that alterations and activities in ephemeral/Class III streams regardless of the presence or absence of aquatic species may require notification to the DFW and acquisition of a Streambed Alteration Agreement.

This comment is also pertinent to section 4.5 Biological Resources, subsection 4.5.1 Aquatics and subsection 4.5.1.2 Overview of Aquatic Habitat Conditions; pages 4.5-23 through 4.5-26 where “headwater streams” are defined as Class II and Class III streams.

Biological Resources and Riparian Function: The term “riparian” is used throughout the VTP in close association with iconic woody riparian/wetland plant species like cottonwood and willow (*draft PEIR section 4.5, pg. 4.5-20 and 4.5.1.2, pg. 4.5-24*).

While the presence of riparian vegetation can be an appropriate indicator in temperate perennial and intermittent stream ecosystems, it is not generally a meaningful indicator of dryland episodic stream environments where stream-associated upland species tend to dominate.

CDFW recommends that the term “riparian” be defined and added to the VTP Glossary and that its usage be clarified throughout the document. To reflect the most current usage of the term and its pertinence in the VTP’s statewide application, CDFW recommends the definition developed by the National Research Council (as noted above) and currently used in practice by CDFW and the SWRCB (NRC 2002)

[A]reas adjacent to perennial, intermittent, and ephemeral streams or lakes, and estuarine-marine shorelines that are transitional between terrestrial and aquatic ecosystems and that are distinguished by gradients in biophysical conditions, ecological processes, and biota; an area through which surface and subsurface hydrology connect waterbodies with their adjacent uplands. Riparian areas include those portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems (i.e., a zone of influence) (NRC 2002).

Aquatics/Aquatic Habitat Conditions: Headwater streams are typically defined by the scientific community as first or second order streams, relatively higher in a watershed than the larger and higher order streams they flow to. However, first order streams also occur much lower and in greater density in dryland watersheds of the state. As used in the examples below and as linked with the FPRs Class II and Class III terminology, it is unclear whether the VTP has included first order dryland streams in their analysis or what protection they would receive. Moreover, the VTP application describes species use typical of temperate region intermittent and perennial headwater stream ecosystems. Species use of dryland first order – or headwater – or Class II and Class III streams is typically quite different, oftentimes with the use of these episodic water sources by terrestrial species from many miles away.

This comment is also pertinent to section 4.5 Biological Resources, subsection 4.5.1 Aquatics and subsection 4.5.1.2 Overview of Aquatic Habitat Conditions; pages 4.5-23 through 4.5-26 where “headwater streams” are defined as Class II and Class III streams and also to Chapter 6, section 6.4.11k Cumulative Effects Potential – Criterion 1K, pages 6-82 through -83, disturbance as an influence on Headwater Streams Ecosystem Structure and Function.

CDFW recommends that the Final PEIR for the VTP indicate that alterations and activities in ephemeral/Class III streams regardless of the presence or absence of aquatic species may require notification to the CDFW and acquisition of a Streambed Alteration Agreement. CDFW also recommends that the term “headwater stream” be defined and added to the Glossary.

Watershed Condition and Geomorphology: Section 4.7.3 of the draft PEIR states:

Geomorphology is not an environmental resource like biology or cultural resources. Potential effects on fluvial geomorphic processes are not direct environmental impacts, but geomorphic effects have the potential to lead to other environmental effects through further changes in channel conditions. Changes in vegetative cover associated with VTP projects and the increase or decrease in the amount of high severity fires can in turn influence the delivery of sediment and large woody debris to stream channels; these in turn modify the geomorphic characteristics of a stream. Changes in geomorphology can affect both sediment transport and, through aggrading channel beds, can increase the frequency or severity of flooding.

This is not correct. Alterations of basic fluvial geomorphic processes do indeed result in direct and potentially detrimental environmental impacts. For example: alterations to sand transport that directly supplies dune habitat utilized by sensitive species such as the fringe toed lizards; changes in sediment supply that result in the loss of spawning gravels that provide life stage-critical spawning habitat to salmonids; changes in bank erosion and loss of nesting habitat for bank swallows.

CDFW recommends that the first sentence of this section be altered accordingly:
~~*Geomorphology is not an environmental resource like biology or cultural resources. Potential Effects Effects on fluvial geomorphic processes can result in ~~are not~~ indirect detrimental environmental impacts, but geomorphic effects have the potential to lead to other environmental effects through further alterations in the geomorphic processes responsible for creating and maintaining the physical habitat that sustains the stream ecosystem changes in channel conditions.*~~

The Section 4.7.3 of the draft PEIR further states:

Fluvial geomorphology is the study of sediment transport by flowing water and its effect on the size and shape of stream channels.

Sediment transport is only one of many processes that comprise the science of fluvial geomorphology. While it is correct that the morphology of many fluvial systems – and particularly fully alluvial channels – is largely a function of flow regime and sediment load, it is not the only factor or the dominate factor controlling channel morphology.

CDFW recommends that this sentence be altered accordingly: *Fluvial geomorphology is the study of the processes that operate in river systems and the landforms a river creates or has created ~~sediment transport by flowing water and its effect on the size and shape of stream channels.~~*

Potential Effects on Water Quality: The statement below explicitly limits protection of overstory trees to those that occur along fish-bearing perennial streams, reflects the north coast, temperate region perennial stream ecosystem orientation of the FPRs.

For the Proposed Program and Alternatives 2, 3 and 4 there is no requirement to retain overstory trees along Class III streams; however, these are seasonal streams that do not flow during the summer months, and thus are not subject to increased solar radiation on the stream surface when these streams are flowing (draft PEIR section 5.7.4, pgs. 5.7-12 & 13).

CDFW recommends that the statement be edited to also address riparian resources associated with the episodic stream ecosystems that dominate the dryland environs of the state.

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September 20, 2011

Mr. Richard Bruckner, Director
Los Angeles County Department of Regional Planning
320 West Temple Street
Los Angeles, CA 90012

**Subject: Agricultural Clearing particularly within the Antelope Valley;
Notice of Preparation for a Draft Programmatic Environmental Impact
Report for Los Angeles County General Plan and Antelope Valley Area
Plan SCH # 2011081042**

Dear Mr. Bruckner:

The Department of Fish and Game (Department) recently submitted our NOP comments, dated September 14, 2011, for the Draft Programmatic Environmental Impact Report for Los Angeles County General Plan and Antelope Valley Area Plan SCH # 2011081042 (Plans). We wanted to take this opportunity as Los Angeles County (County) is revising their Plans, to specifically address issues related to agricultural clearing, particularly in the Antelope Valley. We recommend that the County address these issues in the upcoming revisions to the Plans.

The Department is very concerned regarding the historic and continued loss and degradation of biological and botanical resources held in public trust by the Department within the west Mojave Desert of the unincorporated areas of the County. The Department is particularly concerned regarding ongoing direct and cumulative adverse environmental impacts to the biological diversity in the Antelope Valley resulting from agricultural clearing activities. Agricultural clearing, unless conducted within a Significant Ecological Area (SEA), is normally not subject to County review under the California Environmental Quality Act (CEQA) because such activity is exempted from discretionary action by the County (not considered a project under CEQA). CEQA was adopted in 1970 as a statute requiring state, county, and city governments to assess the potential for negative environmental impacts associated with proposed private developments and to assess avoidance and mitigation measures.

The lack of discretionary regulatory oversight by the County has resulted in ongoing significant, direct, and cumulative losses of important representative elements of the natural heritage and biological diversity of the County, including species listed as threatened and/or endangered under the California Endangered Act (CESA) and Federal Endangered Species Act (FESA). In the Antelope Valley, state and federal listed species include but are not limited to Mohave ground squirrel, Mojave desert tortoise, and Swainson's hawk. Agricultural clearing also adversely impacts other special status species including but not limited to western burrowing owl, American badger, tricolored blackbird, coast horned lizard and special status botanical resources such as Joshua tree woodland, saltbush scrub, and several plant species upon which adverse impacts would be considered significant under a comprehensive CEQA review process. Several of the

species referenced above are found nowhere else in the County. Western burrowing owl is a species which has disappeared as a breeding population from the entire County except for the Antelope Valley.

The lack of discretionary oversight of agricultural clearing has also placed an inequitable burden for environmental compliance and mitigation costs upon private and public entities who are not afforded exemptions from the CEQA process and for whose direct project disturbance footprints are often much smaller than the several hundred-acre agricultural clearing operations that are typical in the Antelope Valley. The continued loss of habitat in the Antelope Valley for sensitive species not presently listed under CESA or FESA may accelerate the necessity of future listings for these species and greater regulatory oversight.

Agricultural clearing may not be exempt from state and/or federal incidental take authorization under CESA and FESA, from Section 1600 *et seq.* of the California Fish and Game Code relating to the alteration of Department jurisdictional drainages or lakes, nor from state and federal laws protecting native birds species. Unlike activities that are subject to CEQA, County-exempted agricultural clearing activities are not brought to the attention of natural resource agencies or the public because there are no requirements that these entities be publicly noticed of such activity. The lack of CEQA oversight at the County level for agricultural clearing also frequently results in no biological assessment being required to determine impacts to special status species and jurisdictional waters of the state in order to plan for appropriate avoidance, mitigation measures and regulatory compliance. This blanket exemption of oversight makes it very difficult for the Department to protect public trust resources, contributes to violations of law, and furthers unmitigated loss of biological diversity.

The Department understands that large-scale unregulated and unauthorized agricultural clearing of native vegetation has resulted in unacceptable impacts to biodiversity within the Antelope Valley. Particularly troubling is that some of these activities include hundreds of acres within County SEAs which were apparently not known by the County until after adverse impacts to biological and botanical resources had already occurred. From an environmental perspective, any further unregulated, unauthorized and unmitigated clearing of public trust resources for agricultural purposes within this area cannot be supported on a biologically sustainable level and is a matter of very serious concern to the Department. To illustrate the Department's concern, examples of agricultural-related clearing of biologically diverse habitats in the west Mojave of the County include, but are not limited to:

1. A grading violation occurred on an agricultural-leased portion of the Red Dawn Sun Tower LLC property, partially within the Joshua Tree Significant Ecological Area # 60. A private citizen alerted the County on March 9, 2009 regarding their concern over the grading. The 540-acre property is located along Avenue B and W. 200th Street. Grading occurred on approximately 325 acres of the property. Of the 325 acres, 95.44 acres were Joshua Trees (63.86 acres of Joshua Trees occurred in the SEA #60). Under current County code, it is the Department's understanding that the remainder of the clearing within habitat outside the SEA will not be considered for any remediation

discussion under the Conditional Use Permit for the solar energy project proposed for this site.

2. The Department observed agricultural activity located on 693.36 acres within SEA #55 (Desert Montane Transect) in the eastern edge of the County within the previously proposed Gray Butte Solar Array project which was under review by the Los Angeles County Department of Regional Planning. According to aerial imagery on Google Earth, the parcel supported native desert vegetation and Department jurisdictional drainages prior to the complete clearing of the parcel between August 2005 and October 2005. This clearing appears to have occurred without any County regulatory oversight or knowledge. The Department is very concerned that the conversion of the habitat within SEA #55 resulted in a significant impact to biological resources because the parcel to the immediate west is occupied by desert tortoise, and Mohave ground squirrel is known to occur in the vicinity. The Department brought its concern to County zone enforcement and was advised that nothing could probably be done to address any unauthorized clearing within the SEA because the statute of limitations had probably expired for County enforcement of any grading code violation applicable to destruction of the SEA.

In order to proactively address the Department's concerns relative to the current lack of County regulatory oversight of biologically damaging agricultural clearing, and to assist in compliance with state and federal law and existing county codes applicable to the protection of County SEAs, the Department would like to make the following recommendations:

1. The County should codify discretionary approval measures to protect biological diversity in the Antelope Valley that is being lost to unregulated agricultural activities within areas outside of SEAs. Specifically agricultural clearing should be considered by the County as a project subject to CEQA review with appropriate consideration given to impacts assessment, avoidance and mitigation measures to reduce impacts below a level of significance under CEQA.
2. The County should devote a greater effort to monitor unauthorized clearing within SEAs and address these activities in a timely manner so that appropriate enforcement and corrective measures may be employed to reduce further damage and mitigate for the loss of biological resources. At a minimum, SEAs should regularly be evaluated for integrity within a timeframe so as not to exceed any statute of limitation for enforcement purposes.
3. All SEAs should be specified as such in property deeds that run with the property, with language explaining that altering of said property may be subject to discretionary action by the County.
4. Compliance with state and federal regulatory resource agency laws should be verified by the County prior to awarding discretionary approval for agricultural clearing.

The Department appreciates the County's attention to the Department's concerns and recommendations, and is hopeful that the County will initiate a dialogue with the Department to facilitate timely action on this issue.

Mr. Richard Bruckner, Director
September 20, 2011
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Please contact Mr. Scott Harris, Environmental Scientist at (626) 797-3170 if you have any questions or for further coordination on this matter.

Sincerely,



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