Mr. Mendel Stewart, Field Supervisor  
U.S. Fish and Wildlife Service  
2177 Salk Avenue, Suite 250  
Carlsbad, CA  92008

Subject: Draft Environmental Impact Statement for the Orange County Transportation Authority’s Measure M2 Natural Community Conservation Plan / Habitat Conservation Plan, Orange County, California (CEQ# 20140319)

Dear Mr. Stewart:

The U.S. Environmental Protection Agency has reviewed the above-referenced document pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The EPA appreciates the efforts of the U.S. Fish and Wildlife Service and the Orange County Transportation Authority to develop a Natural Community Conservation Plan / Habitat Conservation Plan (NCCP/HCP) to avoid, minimize and mitigate take of 13 proposed covered species, and their habitats, affected by 13 proposed freeway projects and associated preservation activities. We recognize the importance of a coordinated approach to protecting and preserving the species and their habitats from the covered activities, and agree that a holistic, regional approach to conservation is generally preferable to piecemeal, project-by-project permitting.

We support the proactive planning elements that have been incorporated into the Draft EIS to increase the size and habitat quality of core habitat areas and protect the connectivity of core areas to other protected areas throughout the Plan Area over the proposed 40-year permit term. We note the conservation strategy includes acquisition of 1,150 acres of natural habitat that would be protected into perpetuity. OCTA has also approved funding for 11 restoration projects, totaling approximately 400 acres of restored habitats.

Notwithstanding the positive elements of the conservation strategy, we have concerns regarding potential impacts to air, water and biological resources from the proposed covered activities. Accordingly, we have rated the Draft EIS as Environmental Concerns – Insufficient Information (EC-2) (see the enclosed “Summary of Rating Definitions”). We recommend that the Final EIS specify mitigation measures to reduce impacts to air quality from all covered activities; clarify how the OCTA will work with the USFWS and the U.S. Army Corps of Engineers to comply with Section 404 of the Clean Water Act to achieve a no-net-loss of wetlands in the Plan Area; and provide additional information on how climate change may affect the covered species and their habitats. We also recommend that the Final EIS include a commitment to follow an integrated pest management approach for restoration and land management activities. Our
enclosed detailed comments identify the need for additional information regarding these matters and provide recommendations to reduce potential impacts.

We appreciate the opportunity to review this Draft EIS. When the Final EIS is released for public review, please send one hard copy and one CD ROM to the address above (mail code: ENF-4-2). If you have questions, please contact me at (415) 972-3521, or contact Tom Plenys, the lead reviewer for this project. Mr. Plenys can be reached at (415) 972-3238 or plenys.thomas@epa.gov.

Sincerely,

/s/

Kathleen Martyn Goforth
Manager
Environmental Review Section

Enclosures:  EPA’s Summary of EPA Rating Definitions
             EPA’s Detailed Comments

Cc:          Sylvia Vega, Deputy District Director of Environmental Planning, Caltrans
            District 12
            Dan Phu, Section Manager, OCTA
SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency’s (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)
The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

Air Quality

The Plan Area is within a portion of the South Coast Air Basin classified as a federal nonattainment area with respect to ozone (extreme) and PM$_{2.5}$ (p. 6-2). For biological mitigation and conservation activities, the Draft EIS indicates that criteria pollutant emissions generated could result in adverse effects on short- and long-term ambient air quality and climate change (p. 4.3-9). Primary emission sources include mobile and construction equipment exhaust and dust from clearing land and wind exposure. Since the annual emissions would be below local and South Coast Air Quality Management regional significance thresholds, and not exceed federal de minimis levels, the Draft EIS concludes that no mitigation would be required for the biological mitigation and conservation activities.

For the proposed covered freeway projects, the Draft EIS incorporates by reference the 2006 Long Range Transportation Plan Program EIR which determined that air quality impacts would exceed criteria pollutant thresholds and expose sensitive receptors to significant health risk during construction activities (p. 4.3-4). Short-term construction-related impacts were projected to remain significant after mitigation was incorporated (p. 4.3-4). Appendix E includes brief descriptions of the LRTP programmatic mitigation measures proposed at that time (p. 4.3-6).

In light of the nonattainment status, the short- and long-term adverse effects identified and the numerous projects proposed in the Plan Area, all feasible measures should be implemented to reduce and mitigate air quality impacts to the greatest extent possible. While we recognize that covered freeway projects may be analyzed through future project-specific environmental analyses, we encourage OCTA, USFWS and Caltrans to use this regional planning effort to identify up-to-date mitigation measures, incorporate the use of the best available technology and emission controls, and ensure consistent implementation of these measures for all future covered activities.

Recommendations:
Include, in the Final EIS, an updated Appendix E that lists all mitigation measures to consider when designing covered transportation projects and preservation management activities. In addition to measures necessary to meet all applicable local, state, and federal requirements, we recommend that the following measures be included:

Fugitive Dust Source Controls:
- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour. Limit speed of earth-moving equipment to 10 mph.
Mobile and Stationary Source Controls:

- Minimize use, trips, and unnecessary idling of heavy equipment.
- Maintain and tune engines per manufacturer’s specifications to perform at EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies.
- Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications. The California Air Resources Board has a number of mobile source anti-idling requirements which should be employed (http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm).
- Prohibit any tampering with engines and require continuing adherence to manufacturer’s recommendations.
- In general, commit to the best available emissions control technologies for project equipment:
  - On-Highway Vehicles - On-highway vehicles used for future covered activities should meet or exceed the US EPA exhaust emissions standards for model year 2010 and newer heavy-duty on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, etc.).
  - Nonroad Vehicles & Equipment - Nonroad vehicles & equipment used for all covered activities should meet or exceed the US EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines (e.g., construction equipment, nonroad trucks, etc.).
  - Low Emission Equipment Exemptions – The equipment specifications outlined above should be met unless: 1) a piece of specialized equipment is not available for purchase or lease within the United States; or 2) the relevant project contractor has been awarded funds to retrofit existing equipment, or purchase/lease new equipment, but the funds are not yet available.
  - Advanced Technology Demonstration & Deployment – OCTA, USFWS and Caltrans are encouraged to demonstrate and deploy heavy-duty technologies that exceed the latest US EPA emission performance standards for the equipment categories that are relevant for the covered activities (e.g., plug-in hybrid-electric vehicles - PHEVs, battery-electric vehicles - BEVs, fuel cell electric vehicles - FCEVs, etc.).

Administrative controls:

- Specify the means by which OCTA, USFWS and Caltrans will minimize impacts to sensitive receptors, such as children, the elderly, and the infirm. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.
- Prepare an inventory of all equipment prior to construction.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.

1 http://www.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm
2 http://www.epa.gov/otaq/standards/nonroad/nonroadci.htm
Update, as necessary, the Final EIS to reflect the latest State and federal attainment designations for air quality.

Update, in the Final EIS, the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.

Describe, in the Final EIS, how these mitigation measures would be made an enforceable part of future covered activities. We recommend implementation of applicable mitigation measures prior to or, at a minimum, concurrently with the commencement of construction of all future activities.

**Water Resources**

*Clean Water Act Permitting and Section 404*

The EPA commends USFWS and OCTA for the analyses included in the Draft EIS to quantify potential impacts to jurisdictional Waters of the United States (WUS) from the covered freeway projects. We also note that the Army Corps of Engineers has verified potential compensatory mitigation acreages at acquisition and restoration sites (Tables 4.4-7 and 4.4-8). These measures demonstrate a proactive commitment to preserving and restoring wetland resources.

According to the Draft EIS, the Corps is conducting a separate NEPA analysis to establish a streamlined permitting process and mitigation site approval for CWA Section 404 permits. Table 4.4-4 identifies 9 freeway projects that will be included in this comprehensive permitting process and 4 projects that may be proceed under separate Section 404 permitting. Further details are needed regarding the streamlined permitting process, including how jurisdictional wetlands will be identified, avoided and mitigated over the permit term to support a holistic, regional approach to conservation. As an example of the level of detail that would be useful, see Section 4.4 of the Draft EIS, which discusses potential impacts to California Department of Fish and Wildlife jurisdictional streambeds; describes the process that will be used to determine project-specific compensatory mitigation ratios; identifies an implementation schedule for all projects; and commits to mechanisms to track mitigation progress (p. 4.4-40). The appendices also include a detailed report on Streambed Program Guidelines applicable to the covered freeway projects.

*Recommendations:*

Explain, in the Final EIS, how OCTA will work with the FWS and the Corps to identify, avoid and mitigate jurisdictional wetlands over the 40 year permit term to be consistent with CWA 404(b)(1) Guidelines and the CWA Final Compensatory Mitigation Rule. Provide a commensurate level of detail as in the discussion of CDFW’s jurisdictional streambeds in Section 4.4., including the likely compensatory mitigation ratio for impacts to WUS; the factors to be used in determining project-specific mitigation ratios; an implementation schedule that ensures compensatory mitigation will occur ahead of any potential impacts to WUS to avoid temporal loss; and mechanisms to track compensatory mitigation progress and success.

---

3 40 CFR Part 230
Discuss, in the Final EIS, whether the parcels identified at acquisition and restoration sites would be sufficient in size, value and function to fully compensate for estimated impacts to WUS from the covered freeway projects. Although the OCTA has not yet demonstrated compliance with CWA 404(b)(1) Guidelines, we note that Table 4.4-4 estimates that 7.5 to 12 acres of WUS may be impacted by the 9 projects that will be included in the streamlined permitting process, in addition to 6.6 acres (includes temporary and permanent impacts) for 4 projects that may be covered under this comprehensive permitting strategy or may proceed under separate Section 404 permitting.

Include, in the Final EIS, the commitment to avoid and minimize impacts to WUS to the maximum extent practicable, per the Clean Water Act Section 404(b)(1) Guidelines.

**Climate Change**

While the Draft EIS quantifies greenhouse gas emissions from the proposed action and discusses the 2010 Council on Environmental Quality’s draft NEPA guidance on climate change, it provides little detail on how climate change may affect the covered species and their habitats. EPA is concerned that, over the 40-year term of the NCCP/HCP, climate change may induce a multitude of effects, such as temperature increases and prolonged droughts, and these changes could result in serious impacts, including the alteration or destruction of habitat critical to covered species, introduction of invasive species, and the migration of covered species out of the Plan Area.

On December 18, 2014, the CEQ released revised draft guidance that describes how federal departments and agencies should consider the effects of greenhouse gas emissions and climate change in their NEPA reviews. The revised draft guidance supersedes the draft greenhouse gas and climate change guidance released by CEQ in February 2010 that is referenced in the Draft EIS Section 3.3.1 - Regulatory Setting for Air Quality and Greenhouse Gases. This new draft guidance explains that agencies should consider both the potential effects of a proposed action on climate change, as indicated by its estimated greenhouse gas emissions, and the implications of climate change for the environmental effects of a proposed action. We note that Section 8.6.2 of the NCCP/HCP - Changed Circumstances – includes information that could serve as a good starting point to more accurately depict in the Final EIS how climate change may affect future covered activities.

**Recommendations:**

Update the Regulatory Setting section of the Air Quality and Greenhouse Gases chapter to reflect the new CEQ draft guidance released on December 14, 2014.

Include, in the Final EIS, a detailed discussion of potential impacts of climate change on the covered species and their habitat, how these impacts would be identified and managed, and how the adaptive management plan would ensure that mitigation measures are effective in helping to offset these impacts. We note that Section 8.6.2 of the NCCP/HCP - Changed Circumstances – may help inform this discussion.

Describe any measures that would be undertaken to improve the adaptability and resilience of the proposed project to climate change.
Use of Pesticides

According to the Draft EIS, the extent of potential pesticide applications is unknown at this time (p. 4.3-12). The Draft EIS indicates that any associated emissions would be minimal (i.e., isolated treatment of problem areas) and concludes that impacts would be less than significant, and no mitigation measures would be required. We note in the NCCP/HCP that a Resource Management Plan will be developed for each Preserve which would provide a list of pesticides and consider the use of an integrated pest management approach (p. 7-7). We encourage OCTA and USFWS to use this regional planning effort to discuss the potential effects of pesticide use, identify best practices and ensure consistent implementation of these measures for all future vegetation management at acquisition and restoration sites.

Recommendations:
Specify, in the Final EIS, pesticides (including, but not limited to, herbicides) that may be used in the Plan Area and provide information on human health impacts associated with exposure to the specific pesticides that could be used.

Provide information on environmental impacts associated with specific pesticides that may be used, including impacts to non-target organisms, federally-listed species, ground water, surface water, and soils. For more information on potential effects a pesticide may have to a listed species, go to: www.epa.gov/espp/litstatus/effects/index.htm

Commit to specific best practices for pesticide use to protect human health and the environment

Consider, and provide information regarding, alternatives to pesticides for controlling invasive species.

Commit, in the Final EIS, to only using pesticides in the context of an integrated pest management approach.