



EIR/EIS (Volume II) for **OCTA M2**
**Natural Community Conservation Plan/
Habitat Conservation Plan**

SCH# 2010121008

Final

November 2016

Prepared for
Orange County Transportation Authority
550 S. Main Street
Orange, CA 92863

Prepared by
ICF
525 B Street, Suite 1700
San Diego, CA 92101

U.S. Fish and Wildlife Service
2177 Salk Avenue
Carlsbad, CA 92008



FINAL

**M2 NATURAL COMMUNITY CONSERVATION
PLAN/HABITAT CONSERVATION PLAN EIR/EIS**

VOLUME II – RESPONSE TO COMMENTS

SCH # 2010121008

PREPARED FOR:

Orange County Transportation Authority
550 South Main Street
Orange, CA 92863

PREPARED BY:

ICF
525 B Street, Suite 1700
San Diego, CA 92101

November 2016



ICF. 2016. M2 Natural Community Conservation Plan/Habitat Conservation
Plan EIR/EIS. Final (Volume II – Response to Comments). (ICF 00536.10.)
San Diego, CA. Prepared for Orange County Transportation Authority,
Orange, CA.

9.1 List of Comment Letters

This chapter contains the written comments received on the Draft EIR/EIS (environmental impact report/environmental impact statement) and responses to the issues/concerns raised by the commenters. The comment letters immediately precede the corresponding responses. OCTA received 48 comment letters on the Draft M2 Natural Community Conservation Plan/ Habitat Conservation Plan (NCCP/HCP) and Draft EIR/EIS during the public review period (Table 9-1). Comment letters are organized chronologically and grouped by public agencies, organizations, interested parties, and, due to the large number of comment letters received on trail/public access issues, trail/public access commenters.

Comment letters were marked to identify the specific issues raised and numbered accordingly in the margin. Comment letters were given numbers (starting with “1”) in the order they were received. Thus, the second letter we received is identified as Comment “2”. The specific issue raised in the letter is then numbered 2-1, 2-2, etc.

OCTA, in coordination with the Wildlife Agencies, reviewed and responded to each of the 48 comment letters on the Draft M2 NCCP/HCP and EIS/EIR. During the review, OCTA and the Wildlife Agencies identified a number of recurring themes raised in some of the individual letters (Letter #19) and within groups of letters (trails/public access commenters). Instead of repeating responses to these themes throughout the individual responses, Master Responses were prepared. These Master Responses are at the beginning of their corresponding sections. When individual comments can be addressed (or partially addressed) by a Master Response, the individual response directs the reader to the relevant Master Response.

Table 9-1. Comment Letters Received on the Draft EIR/EIS

Letter	Date	Individual/Organization	Page
9.2.1 Public Agencies			
1	10/27/14	U.S. Department of the Interior	9-3
2	12/12/14	Metropolitan Water District of Southern California	9-5
3	12/23/14	Governor’s Office of Planning and Research	9-12
4	12/31/14	Governor’s Office of Planning and Research	9-15
5	1/21/15	California Department of Parks and Recreation	9-20
6	2/5/15	U.S. Environmental Protection Agency	9-22
7	2/6/15	Orange County Mosquito and Vector Control District	9-35
8	2/12/15	Santa Ana Regional Water Quality Control Board	9-84
9.2.2 Organizations			
9	1/28/15A	Puente Hills Habitat Preservation Authority	9-87
10	1/28/15B	Puente Hills Habitat Preservation Authority	9-89
11	2/2/15	Endangered Habitats League	9-100
12	2/4/15	Environmental Coalition	9-103

Letter	Date	Individual/Organization	Page
13	2/5/15	Sea and Sage Audubon	9-155
14	2/6/15	Endangered Habitats League	9-159
9.2.3 Interested Parties			
15	11/20/14	Perez, Lisa	9-161
16	1/27/15	Thier, Paul	9-163
17	1/28/15	Bettencourt, Philip	9-165
18	2/5/15	Hetzel, Tom	9-168
19	2/5/15	Rempel, Ron	9-172
20	2/6/15	Jacobson, Sandra	9-211
9.2.4 Trails/Public Access Commenters			
21	11/20/14	Thier, Paul	9-231
22	12/3/14	Capps, Diana	9-234
23	1/21/15	Vansickle, Rod	9-236
24	1/28/15	Trevor, Jamie	9-238
25	2/3/15	Equestrian Trails, Inc.	9-240
26	2/5/15	Hajboutros, Rostom	9-243
27	2/5/15	Johnson, Delma	9-245
28	2/5/15	LaFayette, Darryl	9-249
29	2/5/15	Williams, Karen	9-251
30	2/6/15	Apalategui, Kristy	9-253
31	2/6/15	Brown, Larry	9-255
32	2/6/15	Brown, Tracy	9-258
33	2/6/15	Frey, K.	9-261
34	2/6/15	Jordan, Ryan	9-263
35	2/6/15	Judd, Dana	9-266
36	2/6/15	London, Julie	9-272
37	2/6/15	Mascia, Vanessa	9-275
38	2/6/15	McGriff, Gunnar	9-278
39	2/6/15	McGriff, Patrick	9-280
40	2/6/15	McGriff, Sina	9-282
41	2/6/15	Thordarson, Sveinn and Sigrid	9-284
42	2/7/15	Keppelman, Courtney	9-286
43	2/12/15	Thordarson, Helga	9-288
44	2/14/15	Johnson, Delma	9-291
45	3/4/15	Johnson, Delma	9-294
46	3/20/15	Brown, Rocky	9-299
47	4/1/15	Johnson, Delma	9-302
48	7/17/15	Johnson, Delma	9-323

9.2 Individual Comments and Responses

9.2.1 Public Agency Comments

Comment Letter 1: U.S. Department of the Interior – 10/27/14



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pacific Southwest Region
2800 Cottage Way, Suite W-2606
Sacramento, California 95823-1846

IN REPLY REFER TO:
FWS/RRES

OCT 27 2014

U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, California 94105

Dear Colleagues:

The U.S. Fish and Wildlife Service (Service) electronically filed the Draft Environmental Impact Statement (EIS) for the Draft Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) with your Washington D.C. Office of Federal Activities (e-NEPA). Our Notice of Availability (NOA) for the Draft EIS is expected to publish in the **Federal Register** on November 7, 2014. Enclosed please find one paperbound copy and one CD-ROM of the Final EIR/EIS for Region 9 review. For your convenience, a copy of our NOA is also enclosed.

1-1

The Draft EIS analyzes the proposed action and alternatives by the Service to issue a 40-year incidental take permit under the Federal Endangered Species Act of 1973, as amended. The section 10(a)(1)(B) permit is necessary because take of 13 proposed Covered Species could occur during implementation of the HCP. The permit would accommodate freeway improvement projects along existing freeways throughout Orange County, California.

If you have any questions or need more information, please contact John Robles, U.S. Fish and Wildlife Service, Pacific Southwest Region, California at (916) 414-6731 or Jonathan Snyder, U.S. Fish and Wildlife Service, Carlsbad Field Office, California at (760) 432-9440.

Sincerely,

Deputy Regional Director

Enclosures

Response to Comment Letter 1: U.S. Department of the Interior – 10/27/14

Comment 1-1 Response

Comment: The commenter states that the Draft EIR/EIS for the Draft NCCP/HCP has been filed electronically and the Notice of Availability (NOA) for the Draft EIR/EIS was published in the *Federal Register* on November 7, 2014. The commenter forwarded a hard copy and CD-ROM of the Final EIR/EIS for Region 9 review as well as a copy of the NOA.

Response: Thank you for your comment. These comments have been noted for the record. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 2: Metropolitan Water District of Southern California (MWD) – 12/21/14



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Executive Office

December 12, 2014

Via Regular Mail

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

Dear Mr. Stewart:

Notice of Availability for the
Draft Environmental Impact Report/Environmental Impact Statement for the
Orange County Transportation Authority M2 Natural Community Conservation
Plan/Habitat Conservation Plan and Incidental Take Permit Application; FWS-R8-ES-N213

2-1

The Metropolitan Water District of Southern California (Metropolitan) reviewed the Notice of Availability and Draft Environmental Impact Report/Environmental Impact Statement for the Orange County Transportation Authority Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan in Orange County, California. The Orange County Transportation Authority (OCTA) is the CEQA Lead Agency for the project, and the United States Fish and Wildlife Service (USFWS) is the NEPA Lead Agency. Thirteen freeway improvement projects are proposed through Measure M2 funds, and mitigation of the environmental impacts from freeway projects are proposed via the OCTA Mitigation and Resource Protection Program (MRPP). The M2 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) is proposed to streamline the environmental permitting process for impacts to sensitive, threatened, or endangered species and their habitats from M2-related projects throughout Orange County. Activities under the NCCP/HCP include preserve acquisition and habitat restoration projects. This letter contains Metropolitan's comments to the proposed project as a potentially affected agency.

Metropolitan is a public agency and regional water wholesaler. It is comprised of 26 member public agencies serving approximately 18.4 million people in portions of six counties in Southern California, including Orange County. Metropolitan's mission is to provide its 5,200 square mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan submitted written comments for the project's Notice of Intent to prepare an Environmental Impact Statement to the US Fish and Wildlife Service (FWS-R8-ES-2010-N224; 8022-1112-0000-F2) in December 2010. Metropolitan's previous comments are not included in

700 N. Alameda Street, Los Angeles, California 90012 • Mailing Address: P.O. Box 54153, Los Angeles, California, 90054-0153 • Telephone: (213) 217-6000

Mr. Stewart
Page 2
December 12, 2014

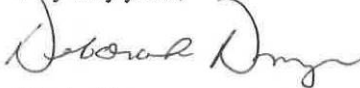
2-1
cont. | Section 1.6 (Issues Raised during the Scoping Process) nor in Attachment B of the draft EIR/EIS. Metropolitan requests that its previous comment letter (attached) be included in these sections of the draft EIR/EIS.

2-2 | Metropolitan has fee property and easement rights for nine pipelines within the proposed project area (see attached map). Based on a review of the project boundaries, the project has the potential to impact Metropolitan's facilities. Metropolitan must be allowed to maintain its rights-of-way and requires unobstructed access to its facilities in order to maintain and repair its system. To avoid potential conflicts with Metropolitan's facilities and rights-of-way, we require that any design plans for any activity in the area of Metropolitan's pipelines or facilities be submitted for our review and written approval. Any future design plans associated with this project should be submitted to the attention of Metropolitan's Substructures Team. Approval of the project should be contingent on Metropolitan's approval of design plans for portions of the proposed project that could impact its facilities.

Detailed prints of drawings of Metropolitan's pipelines and rights-of-way may be obtained by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist the applicant in preparing plans that are compatible with Metropolitan's facilities and easements, enclosed is a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easement of The Metropolitan Water District of Southern California." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way.

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future documentation and plans for this project. For further assistance, please contact Ms. Michelle Morrison at (213) 217-7906.

Very truly yours,


for Deirdre West
Manager, Environmental Planning Team

J:\Environmental Planning&Compliance\COMPLETED JOBS\November2014\EPT Job No. 20141114MIS

Enclosures: Metropolitan 2010 Comment Letter for Project Notice of Intent
Map of Metropolitan Facilities in Project Area
Metropolitan Planning Guidelines



December 29, 2010

Via Fax and Regular Mail
Fax: (707) 822-8411

Mr. James A. Bartel
Field Supervisor
Carlsbad Fish and Wildlife Office
U.S. Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, CA 92011
Dear Mr. Bartel:

Notice of Intent to prepare an Environmental Impact Statement for Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan/Master Streambed Alteration Agreement

2-3

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the notice for this project. The U.S. Fish and Wildlife Service is acting as the Lead Agency under the National Environmental Policy Act (NEPA) and intends to prepare an Environmental Impact Report/ Environmental Impact Statement regarding proposed activities that will require an incidental take permit under the Endangered Species Act for the Orange County Transportation Authority (OCTA) . As the Lead Agency under the California Environmental Quality Act (CEQA), the OCTA intends to carry out 13 planned freeway improvement activities over a period of 30 years, including improvements to portions of I-5, I-405, I-605, SR-22, SR-55, SR-57, and SR-91. The OCTA will apply for an incidental take permit and develop a habitat conservation plan (HCP) for the improvements (collectively identified as the proposed Project) to mitigate for the resulting adverse impacts on threatened, endangered, and other sensitive species.

The proposed freeway improvements and HCP area are located within Orange County. The plan area for the HCP includes all of Orange County (about 798 square miles, or 510,720 acres), and the permit may allow take of Covered Wildlife Species resulting from Covered Activities anywhere in the plan area.

This letter contains Metropolitan’s comments to the proposed Project as a potentially affected public agency.

Mr. James A. Bartel
Page 2
December 29, 2010

2-3
cont.

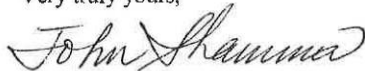
Metropolitan must be allowed to maintain its rights-of-way and requires unobstructed access to its facilities in order to maintain and repair its system. In order to avoid potential conflicts with Metropolitan's facilities and rights-of-way, we require that any design plans for any activity in the area of Metropolitan's pipelines or facilities be submitted for our review and written approval. Approval of the project should be contingent on Metropolitan's approval of design plans for portions of the proposed project that could impact its facilities.

Detailed prints of drawings of Metropolitan's pipelines and rights-of-way may be obtained by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist the applicant in preparing plans that are compatible with Metropolitan's facilities and easements, we have enclosed a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easement of The Metropolitan Water District of Southern California." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way.

In addition, Metropolitan's properties and facilities shall not be used for mitigation under the proposed HCP/NCCP planning effort or incidental take permit. Such properties and facilities would not be part of the reserve(s) that are developed through the HCP/NCCP.

Please continue to keep Metropolitan informed of ongoing developments. We appreciate the opportunity to provide input to your planning process and we look forward to receiving future NEPA/CEQA/ESA documentation on this Project. For further assistance, please contact Miss Connie Yee at (213) 217-5657.

Very truly yours,



John Shamma
Manager, Environmental Planning Team

CY

(J:\Environmental-Planning & Compliance\COMPLETED JOBS\December 2010\Job No. 2010122802 - OC Measure M2 NCCP_HCP_MSA)

Enclosure: Planning Guidelines

Response to Comment Letter 2: Metropolitan Water District of Southern California (MWD) – 12/21/14

Comment 2-1 Response

Comment: The commenter notes that previous comments on the project's Notice of Intent (NOI) in December 2010 were not included in Section 1.6 (Issues Raised during the Scoping Process) or in Attachment B of the Draft EIR/EIS. The commenter requests that its previous comment letter be included in these sections of the Draft EIR/EIS.

Response: Thank you for your comments. The participation of the commenter in the public review of this document is appreciated. MWD is a public agency and regional water wholesaler that comprises 26 member public agencies, serving portions of six counties in Southern California, including Orange County. OCTA regrets that the commenter's scoping letter was inadvertently left out of the Draft EIR/EIS; however, its exclusion does not affect the adequacy of the Draft EIR/EIS. Furthermore, we have included the letter herein for USFWS and the OCTA Board's consideration and have responded to the comments raised therein in the responses below. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 2-2 Response

Comment: The commenter has fee property and easement rights for nine pipelines within the project area; the commenter provided a map of the facilities. The commenter requests that they be allowed to maintain its rights-of-way and unobstructed access to its facilities in order to maintain and repair its system. The commenter requires that any design plans for any activity in the area of their pipelines or facilities be submitted for review and written approval. The commenter requests that any future plans associated with the proposed project be submitted to their Substructures Team. The commenter further states that approval of the plan should be contingent on their approval of design plans for portions of the proposed plan that could affect its facilities.

The commenter also provided contact information for their Substructures Information Line and enclosed a copy of "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easement of The Metropolitan Water District of Southern California." The commenter requests that all submitted designs or plans clearly identify MWD's facilities and rights-of-way.

Response: OCTA agrees that the commenter should be allowed to maintain its rights-of-way and unobstructed access to its facilities in order to maintain and repair its system and nothing in the Plan would prevent access to MWD facilities when the need arises. OCTA will coordinate with the commenter about future design plans and work with the commenter to ensure their facilities and reasonable access to their facilities are not adversely affected. OCTA, however, cannot provide the commenter with discretionary approval authority over OCTA's properties or properties outside of OCTA's control. Future actions under the covered freeway improvement projects must comply with CEQA (and NEPA when triggered) through separate project-specific environmental analyses. OCTA would be required to prepare the appropriate environmental documents and to comply with any mitigation requirements identified as part of project-specific environmental review, as well as any mitigation measures contained in the general plans for each of the participating jurisdictions.

OCTA agrees that any design plans in the vicinity of the commenter's facilities and rights-of-way should clearly identify them on the plans. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 2-3 Response

Comment: The commenter (MWD) provided its 2010 comment letter for the proposed plan's NOI. Concerns raised in the 2010 comment letter were restated in Comment 2-2. The commenter states that MWD facilities should not be used for mitigation under the proposed NCCP/HCP planning effort or incidental take permit. The commenter notes that such properties and facilities would not be part of the reserve(s) that are developed through the proposed plan.

Response: Please note that as indicated in the response to comment 1-1, the NCCP/HCP and the associated EIR/EIS do not use or involve any MWD facilities for mitigation, nor would any of their properties or facilities be included in the OCTA acquired Preserves or funded restoration projects. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 3: State of California, Governor's Office of Planning and Research – 12/23/14



EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

December 23, 2014

RECEIVED
DEC 30 2014
PLANNING DIVISION

Dan Phu
Orange County Transportation Authority
550 South Main Street
P.O. Box 14184
Orange, CA 92863-1584

Subject: Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan
SCH#: 2010121008

Dear Dan Phu:

3-1

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on December 22, 2014, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report
State Clearinghouse Data Base**

SCH# 2010121008
Project Title Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan
Lead Agency Orange County

Type EIR Draft EIR

Description The OCTA has prepared a draft Natural Community Conservation Plan/Habitat Conservation Plan (the Plan) that will provide for habitat conservation/mitigation strategy to off-set environmental impact of the Measure M2 freeway improvement project. The M2 freeway projects are funded by a half-cent sales tax measure and were approved by Orange County voters in November 2006. The draft EIR/EIS analyzes the impacts of the proposed issuance of take permits to OCTA under the NCCPA (CDFW) and ESA (USFWS) based on implementation of the Plan. The Plan will identify the Covered Activities carried out by OCTA that may result in take of Covered Species within the Plan area. Anticipated Covered Activities currently consist of thirteen proposed M2 freeway improvement projects.

Lead Agency Contact

Name Dan Phu
Agency Orange County Transportation Authority
Phone (714) 560-5907 **Fax**
email OCTA_NCCP_HCP_comments@octa.net
Address 550 South Main Street
P.O. Box 14184
City Orange **State** CA **Zip** 92863-1584

Project Location

County Orange
City
Region
Lat / Long
Cross Streets County-wide
Parcel No.
Township

	Range	Section	Base

Proximity to:

Highways
 Airports
 Railways
 Waterways
 Schools
 Land Use

Project Issues Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Coastal Zone; Forest Land/Fire Hazard; Aesthetic/Visual; Agricultural Land

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Conservation; Department of Fish and Wildlife, Region 5; Cal Fire; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 12; Air Resources Board; Regional Water Quality Control Board, Region 8; Regional Water Quality Control Board, Region 9; Native American Heritage Commission; San Gabriel & Lower Los Angeles Rivers & Mountains Conservancy; Other Agency(ies)

Date Received 11/06/2014 **Start of Review** 11/06/2014 **End of Review** 12/22/2014

Response to Comment Letter 3: State of California, Governor's Office of Planning and Research – 12/23/14

Comment 3-1 Response

Comment: The commenter states that the SCH submitted the Draft EIR/EIS to selected state agencies for review and comment in compliance with SCH review requirements for draft environmental documents and pursuant to California Environmental Quality Act (CEQA).

No state agencies submitted comments by the close of the public comment period.

The commenter also states that the Lead Agency has complied with the SCH review requirements for draft environmental documents pursuant to CEQA.

Response: Thank you for your comments. The participation of the State Clearinghouse (SCH) in the public review of this document is appreciated. The SCH coordinates the state-level review of environmental documents that are prepared pursuant to CEQA.

These comments have been noted for the record and have been provided to the OCTA Board of Directors for consideration. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 4: State of California, Governor's Office of Planning and Research – 12/31/14



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

RECEIVED

JAN 09 2015

PLANNING DIVISION

Memorandum

Date: December 31, 2014
To: All Reviewing Agencies
From: Scott Morgan, Director
Re: SCH # 2010121008
Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan

4-1

Pursuant to the attached letter, the Lead Agency has *extended* the review period for the above referenced project to **February 6, 2015** to accommodate the review process. All other project information remains the same.

Please contact the Lead Agency for further information if you no longer have the project.

cc: Dan Phu
Orange County Transportation Authority (OCTA)
550 South Main Street
Orange, CA 92863-1584

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov



AFFILIATED AGENCIES

- Orange County Transit District*
- Local Transportation Authority*
- Service Authority for Freeway Emergencies*
- Consolidated Transportation Service Agency*
- Congestion Management Agency*
- Service Authority for Abandoned Vehicles*

December 30, 2014

Mr. Scott Morgan
 Director, State Clearinghouse
 Governor's Office of Planning and Research
 1400 10th Street
 Sacramento, CA 95812

RE: Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan - Draft Environmental Impact Report/Statement Comment Period - SCH#2010121008

Dear Mr. Morgan:

The Orange County Transportation Authority (OCTA) received a letter, dated December 23, 2014, from the Governor's Office of Planning and Research stating that the review period for the above subject Draft Environmental Impact Report/ Environmental Impact Statement (DEIR/EIS) for the Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP or Plan) closed on December 22, 2014. In the original Notice of Completion (NOC) filed with the State Clearinghouse on November 7, 2014, OCTA requested that the DEIR/EIS be available for a 90-day public review period, from November 7, 2014 through February 6, 2015 (see attached NOC).

We request that the review period be opened back up and extended to the original requested date of February 6, 2015.

If you have any questions, please feel free to contact me at (714) 560-5907 or via email at dphu@octa.net.

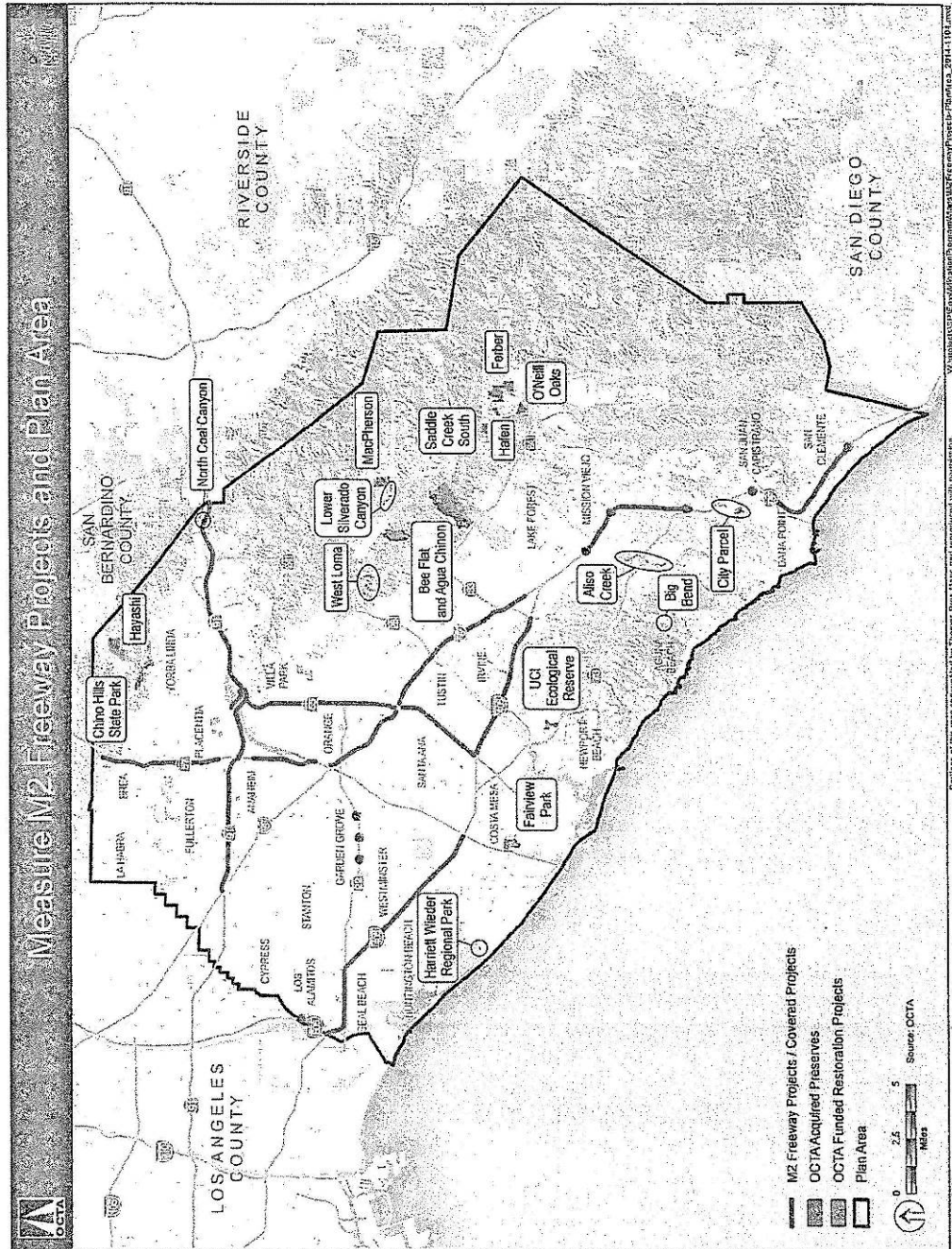
Sincerely,

Dan Phu
 Section Manager, Environmental Programs

DP:lh
 Enclosure

ORANGE COUNTY TRANSPORTATION AUTHORITY
 550 South Main Street
 Orange, CA 92663-1584

Orange County Transportation Authority
 550 South Main Street / P.O. Box 14184 / Orange / California 92663-1584 / (714) 560-OCTA (6282)



Print Form Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0513
 For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #2010121008

Project Title: Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan
 Lead Agency: Orange County Transportation Authority (OCTA) Contact Person: Dan Phu
 Mailing Address: 550 South Main Street Phone: 714-580-5907
 City: Orange Zip: 92663-1584 County: Orange

Project Location: County: Orange City/Nearest Community:
 Cross Street: County-Wide Planning Document Zip Code:
 Longitude/Latitude (degrees, minutes and seconds): * * * N / * * * W Total Acres: 511,476
 Assessor's Parcel No.: Section: Twp.: Range: Base:
 Within 2 Miles: State Hwy #: Waterway: Railways: Schools:
 Airports:

Document Type:
 CEQA: Early Cons Draft EIR Supplement/Subsequent EIR NEPA: NDI Other: Joint Document
 Neg Dec (Prior SCH No.) EA Final Document
 Mf. Neg Dec Other: Draft EIS Other:
 Other: FONSI

Local Action Type:
 General Plan Update Specific Plan Rezoning Annexation
 General Plan Amendment Master Plan Prezone Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, etc.) General-Draft NCCP/HCP
 STATE CLEARINGHOUSE RECEIVED NOV 06 2014

Development Type:
 Residential: Units _____ Acres _____ Employees _____
 Office: Sq. ft. _____ Acres _____ Employees _____
 Commercial: Sq. ft. _____ Acres _____ Employees _____
 Industrial: Sq. ft. _____ Acres _____ Employees _____
 Educational: _____
 Recreational: _____
 Water Facilities: Type _____ MGD _____
 Transportation: Type _____
 Mining: Mineral _____
 Power: Type _____ MW _____
 Waste Treatment: Type _____ MGD _____
 Hazardous Waste: Type _____
 Other: _____

Project Issues Discussed in Document:
 Aesthetic/Visual Fiscal Recreation/Parks Vegetation
 Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality
 Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian
 Biological Resources Minerals Soil Erosion/Compaction/Grading Growth Inducement
 Coastal Zone Noise Solid Waste Land Use
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Cumulative Effects
 Economic/Jobs Public Services/Facilities Traffic/Circulation Other: _____

Present Land Use/Zoning/General Plan Designation:
 N/A

Project Description: (Please use a separate page if necessary)
 The Orange County Transportation Authority (OCTA) has prepared a draft Natural Community Conservation Plan/Habitat Conservation Plan (the Plan) that will provide for habitat conservation/mitigation strategy to off-set environmental impacts of the Measure M2 (M2) freeway improvement projects. The M2 freeway projects are funded by a half-cent sales tax measure and were approved by Orange County voters in November 2005. The draft EIR/EIS analyzes the impacts of the proposed issuance of take permits to OCTA under the NCCPA (CDFW) and ESA (USFWS) based on implementation of the Plan. The Plan will identify the Covered Activities carried out by OCTA that may result in take of Covered Species within the Plan area. Anticipated Covered Activities currently consist of thirteen proposed M2 freeway improvement projects (see attachment).

State Clearinghouse Contact: (916) 445-0613
 State Review Began: 11-10-2014
 SCH COMPLIANCE: 02-06-15
 12-22-2014
 Extended

Please note State Clearinghouse Number (SCH#) on all Comments:
 SCH#: 2010121008
 Please forward late comments directly to the Lead Agency

AQMD/APCD 33
 (Resources: 11/08)

Project Sent to the following State Agencies

<input checked="" type="checkbox"/> Resources	<input type="checkbox"/> State/Consumer Svcs
<input checked="" type="checkbox"/> Boating & Waterways	<input type="checkbox"/> General Services
<input checked="" type="checkbox"/> Coastal Comm	<input type="checkbox"/> Cal EPA
<input checked="" type="checkbox"/> Colorado Rvr Bd	<input checked="" type="checkbox"/> ARB: ALL Other Projects
<input checked="" type="checkbox"/> Conservation	<input type="checkbox"/> ARB: Transportation Projects
<input checked="" type="checkbox"/> CDFW # 5	<input type="checkbox"/> ARB: Major Industrial/Energy
<input checked="" type="checkbox"/> Delta Protection Comm	<input type="checkbox"/> SWRCB: Div. of Drinking Water
<input checked="" type="checkbox"/> Cal Fire	<input type="checkbox"/> SWRCB: Div. Financial Assist.
<input checked="" type="checkbox"/> Historic Preservation	<input type="checkbox"/> SWRCB: Wtr Quality
<input checked="" type="checkbox"/> Parks & Rec	<input type="checkbox"/> SWRCB: Wtr Rights
<input checked="" type="checkbox"/> Central Valley Flood Prot.	<input checked="" type="checkbox"/> Reg. WQCB # 339
<input type="checkbox"/> Bay Cons & Dev Comm.	<input type="checkbox"/> Toxic Sub Ctrl-CITC
<input checked="" type="checkbox"/> DWR	<input type="checkbox"/> Yth/Adlt Corrections
<input type="checkbox"/> OES	<input type="checkbox"/> Corrections
<input type="checkbox"/> Resources, Recycling and Recovery	
CalSTA	Independent Comm
<input checked="" type="checkbox"/> Aeronautics	<input type="checkbox"/> Energy Commission
<input checked="" type="checkbox"/> CHP	<input checked="" type="checkbox"/> NAHC
<input checked="" type="checkbox"/> Caltrans # 12	<input type="checkbox"/> Public Utilities Comm
<input type="checkbox"/> Trans Planning	<input type="checkbox"/> State Lands Comm
Other	<input type="checkbox"/> Tahoe Rgl Plan Agency
<input type="checkbox"/> HCD	<input checked="" type="checkbox"/> SAN FRANCISCO / LOWER L.A.
<input type="checkbox"/> Food & Agriculture	<input type="checkbox"/> Conservancy
	Other: _____

Response to Comment Letter 4: State of California, Governor's Office of Planning and Research – 12/31/14

Comment 4-1 Response

Comment: The commenter states that the public review period was extended to February 6, 2015. All other project-related information remained the same.

Response: Thank you for your comment. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 5: California Department of Parks and Recreation – 1/21/15



State of California • Natural Resources Agency

Edmund G. Brown Jr., Governor

DEPARTMENT OF PARKS AND RECREATION
Inland Empire District
17801 Lake Perris Drive
Perris, CA 92571

Lisa Ann L. Mangat, Acting Director

RECEIVED

JAN 27 2015

PLANNING DIVISION

January 21, 2015

Dan Phu
Orange County Transportation Authority
Attn: M2 NCCP/HCP
550 South Main Street
PO Box 14184
Orange, CA 92863-1584

Re: Draft EIR/EIS for OCTA M2 NCCP/HCP, SCH #2010121008

Dear Mr. Phu:

The Inland Empire District of the Department of Parks and Recreation (State Parks) appreciates the opportunity to comment on the Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) for the Orange County Transportation Authority (OCTA) M2 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP).

5-1

State Parks is a trustee agency as defined by the California Environmental Quality Act (CEQA). State Parks' mission in part is to provide for the health, inspiration, and education of the people of California by preserving the state's extraordinary biodiversity and creating opportunities for high quality outdoor recreation. As the office responsible for the stewardship of Chino Hills State Park (Chino Hills SP), we have an interest and concern about contemplated alterations of land use within and adjacent to the park. The long-term health of Chino Hills SP is dependent on the health of the regional ecosystems because the biotic boundaries of the park extend beyond its jurisdictional boundaries.

In general, we support OCTA's efforts at developing the NCCP/HCP. This program will go a long way toward improving and maintaining biodiversity within the reach of Chino Hills State Park. We affirm the species observations and conservation values referenced in the document regarding acquisition or restoration in or near Chino Hills State Park.

Thank you again for the opportunity to comment and for your serious consideration. For further discussion, please contact me or Enrique Arroyo at (951) 453-6848.

Sincerely,

Kelly Elliott
District Superintendent
Inland Empire District

Response to Comment Letter 5: California Department of Parks and Recreation – 1/21/15

Comment 5-1 Response

Comment: The commenter indicates support of OCTA's efforts to develop the NCCP/HCP and affirms the species observations and conservation values referenced in the document regarding acquisition or restoration in or near Chino Hills State Park.

Response: Thank you for your comment. The participation of State Parks in the public review of this document is appreciated. State Parks is responsible for the stewardship of Chino Hills State Park and has interest in and concern about potential alterations of land within and adjacent to the park.

This comment has been noted for the record. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 6: U.S. Environmental Protection Agency (EPA) – 2/5/15

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION IX
 75 Hawthorne Street
 San Francisco, CA 94105

FEB 5 2015

RECEIVED

FEB 10 2015

PLANNING DIVISION

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

6-1

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.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

US EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE ORANGE COUNTY TRANSPORTATION AUTHORITY'S MEASURE M2 NATURAL COMMUNITY CONSERVATION PLAN / HABITAT CONSERVATION PLAN, ORANGE COUNTY, CALIFORNIA, FEBRUARY 5, 2015

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.

6-3
cont.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.).¹
 - *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.).²
 - *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>

6-3
cont.

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.

6-4

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.³ 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

6-4
cont.

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.

6-5

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:

6-6

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.

Response to Comment Letter 6: U.S. Environmental Protection Agency (EPA) – 2/5/15

Comment 6-1 Response

Comment: The commenter states appreciation for development of the NCCP/HCP and agrees that the holistic and regional approach to conservation is preferred over project-by-project planning. The commenter supports the proactive elements that were incorporated into the Draft EIS to increase the size and 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.

Noting the positive elements of the conservation strategy, EPA states concerns regarding potential impacts related to air, water, and biological resources from the proposed covered activities. U.S. Environmental Protection Agency (EPA) rates the Draft EIS as *Environmental Concerns – Insufficient Information* (EC-2), as defined in Comment 6-2 Response below.

Response: Thank you for your comments. The participation of EPA in the public review of this document is appreciated.

OCTA has provided responses to EPA concerns as described below. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 6-2 Response

Comment: The commenter provided a summary of EPA rating definitions. EPA rates the Draft EIS as *Environmental Concerns – Insufficient Information* (EC-2).

EC-2 is defined as the following:

“EC” (Environmental Concerns)

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 to reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

“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 were within the spectrum of alternatives analyzed 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.

Response: Comment noted. Responses to specific comments and concerns are provided in the responses that follow. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 6-3 Response

Comment 6-3 contains multiple comments, which are addressed individually below.

Comment: 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 EPA recognizes that covered freeway projects may be analyzed through future project-specific environmental analyses, it is encouraged that OCTA, U.S. Fish and Wildlife Service (USFWS) and Caltrans 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

Response: As EPA notes, covered freeway projects will be subject to project-specific air quality analyses. Project-level mitigation will be appropriately identified and prepared by implementing agencies on a project-by-project or site-by-site basis as projects proceed through the design and decision-making process. Project-level mitigation will be based on the technology and emission controls available at the time of analysis, and will be subject to review and comment by the air quality agencies having jurisdiction. The selected mitigation measures are expected to be substantially similar to those recommended by EPA. The details of the mitigation measures will be discussed in subsequent environmental documentation for each project. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment: 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.

Response: As mentioned above, covered freeway projects will be subject to project-specific air quality analyses. Project-level mitigation will be appropriately identified and prepared by implementing agencies on a project-by-project or site-by-site basis as projects proceed through the design and decision-making process. Project-level mitigation will be based on the technology and emission controls available at the time of analysis, and will be subject to review and comment by the air quality agencies having jurisdiction.

The Program EIR for the current SCAG Long Range Transportation Plan (LRTP) update (Southern California Association of Governments, Draft Program Environmental Impact Report for the 2016 Regional Transportation Plan/Sustainable Communities Strategy, November 2015), in which the covered freeway projects will be included, requires mitigation measures that are similar to those recommended by EPA. The mitigation measures included in the Program EIR for the LRTP are the basis for those listed in Appendix E. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment: In addition to measures necessary to meet all applicable local, state, and federal requirements, EPA recommends specific measures related to fugitive dust source controls; mobile and stationary source controls; and administrative controls be included in the Final EIR/EIS.

Response: As noted above, project-specific mitigation measures will be proposed as part of the subsequent environmental documents for each project. The Program EIR for the current SCAG LRTP update (Southern California Association of Governments, Draft Program Environmental Impact Report for the 2016 Regional Transportation Plan/Sustainable Communities Strategy, November 2015), in which the covered freeway projects will be included, requires mitigation measures that are

similar to those recommended by EPA. The mitigation measures included in the Program EIR for the LRTP are the basis for those listed in Appendix E. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment: Update; as necessary, the Final EIS to reflect the latest State and federal attainment designations for air quality.

Response: The State and federal attainment designations have been updated in the Final EIS as requested. See Tables 3.3-1 and 3.3-2 in Section 3.3.1.1 of the Final EIS.

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

Response: As mentioned above, covered freeway projects will be subject to project-specific air quality analyses. Project-level mitigation will be appropriately identified and prepared by implementing agencies on a project-by-project or site-by-site basis as projects proceed through the design and decision-making process. Project-level air quality analyses and mitigation will be based on the technology and emission controls available at the time of analysis, and will be subject to review and comment by the air quality agencies having jurisdiction. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment: 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.

Response: As mentioned above, covered freeway projects will be subject to project-specific air quality analyses. Project-level mitigation including the timing of implementation and the specific enforcement mechanisms will be appropriately identified and prepared by implementing agencies on a project-by-project or site-by-site basis as projects proceed through the design and decision-making process. The details of the mitigation measures will be discussed in subsequent environmental documentation for each project. Project-level air quality analyses and mitigation, including the timing of implementation and the specific enforcement mechanisms, will be subject to review and comment by the air quality agencies having jurisdiction. The selected mitigation measures are expected to be substantially similar to those recommended by EPA.

The Program EIR for the current SCAG LRTP update (Southern California Association of Governments, Draft Program Environmental Impact Report for the 2016 Regional Transportation Plan/Sustainable Communities Strategy, November 2015), in which the covered freeway projects will be included, requires mitigation measures that are similar to those recommended by EPA. The mitigation measures included in the Program EIR for the LRTP are the basis for those listed in Appendix E. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 6-4 Response

Comment: The commenter notes that the analyses included in the Draft EIS to quantify potential impacts on jurisdictional WUS from the covered freeway projects and the potential compensatory mitigation acreages at acquisition and restoration sites (Tables 4.4-7 and 4.4-8 of the 2006 Final EIR for the Long-Range Transportation Plan) demonstrate a commitment to preserving and restoring aquatic resources.

EPA states that 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. The commenter refers to Section 4.4 of the Draft EIS as an example of the level of detail that would be useful.

Response: OCTA has coordinated with the United States Army Corps of Engineers (USACE) and the State Water Resources Control Board (SWRCB) to develop alternative permitting procedures to address anticipated discharges of dredged and fill materials into waters of the U.S. and waters of the State associated with constructing OCTA's M2 Freeway Projects. Specifically, new Letter of Permission (LOP) procedures (SPL -2012-00830-VCL) for the OCTA M2 Freeway Projects are proposed to more efficiently evaluate and, if determined eligible by the USACE in coordination with other federal and state agencies, authorize program activities that would discharge dredged or fill material into waters of the United States (U.S.), as regulated under section 404 of the Clean Water Act (CWA).

The proposed LOP procedures are intended to increase transparency, efficiency, and effectiveness in evaluating the aquatic ecosystem effects of constructing the M2 LOP projects in total, in a more proactive manner, rather than reviewing each individual project application as it is submitted to the USACE. Such a programmatic review allows the USACE to evaluate aquatic resource impacts more holistically, including the adequacy and appropriateness of compensatory mitigation options that could offset unavoidable impacts to the aquatic ecosystem resulting from the individual projects. In fact, OCTA seeks to implement compensatory mitigation as soon as possible once LOP procedures are established, potentially in advance of impacting the aquatic ecosystem to construct the M2 LOP projects. Once established, these LOP procedures would be used to authorize activities that have less than significant individual and cumulative adverse effects on the aquatic environment. Activities that could result in significant individual or cumulative adverse effects on the aquatic environment would not be eligible for authorization under any established LOP procedures.

It is anticipated that the USACE will issue an Individual Permit (setting up the LOP process) and the SWRCB will issue a General 401 Certification in early 2017. OCTA has included a subset of the NCCP/HCP restoration sites and Preserves to be considered for compensatory mitigation by the USACE and SWRCB for these permitting processes. The mitigation sites for the M2 program are expected to be approved by the SWRCB and USACE for use as permittee-responsible mitigation. More details of this programmatic permit will be posted and made available on the OCTA Environmental Mitigation Program website once the permit has been authorized. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 6-5 Response

Comment: Commenter states that the Draft EIS provides little detail on how climate change may affect the Covered Species and their habitats. The commenter is concerned that, over the project timeline, climate change may induce multiple effects, such as temperature increase and prolonged droughts, and states that these changes could result in serious impacts, including the alteration or destruction of habitat that is critical to Covered Species, the introduction of invasive species, and the migration of covered species out of the Plan Area. The commenter notes that Section 8.6.2 of the NCCP/HCP, Changed Circumstances, includes information that could serve as a good starting point for depicting more accurately in the Final EIS how climate change may affect future covered activities.

Response: The Plan conservation strategy includes a number of aspects that are designed to address the changes in temperature/precipitation, altered fire regimes, and transition of habitats over time resulting from climate change. These include:

- Conservation across environmental gradients: The Plan includes a specific biological goal (Landscape Goal 3) and objective (Landscape Objective 3.1) to protect, enhance, and/or restore natural landscapes with high habitat diversity across a range of environmental gradients. OCTA has acquired seven Preserves and approved funding of 11 restoration projects that occur throughout the Plan Area across a range of environmental gradients. Preserves and restoration projects occur from coastal areas to inland foothills, and are distributed across the Plan Area, north to south, and east to west. The location and distribution of the Preserve and restoration projects captures a range of environmental gradients, including a range of climatic conditions (temperature and rainfall), and elevation gradients (which are a surrogate for gradients of climate, geology, and topography). Inclusion of a range of environmental gradients protects a greater diversity of environmental conditions and greater species diversity, and provides opportunities for species to adapt to changed circumstances including climate change by dispersing along environmental gradients. See Section 6.2 of the Plan.
- Preservation of lands adjacent to existing protected lands: The Plan includes a biological goal (Landscape Goal 1, 2) and objective (Landscape Objective 1.1, 2.1) to protect lands adjacent to existing protected lands and add to blocks of protected open space. OCTA acquired seven Preserves—Aliso Canyon, Ferber Ranch, Hafen, Hayashi, MacPherson, O’Neill Oaks, and Saddle Creek South Preserves—and in all instances these Preserves are adjacent to existing protected lands, located within priority conservation areas as identified in the CBI Conservation Assessment (CBI 2009), and add to the protection of large blocks of natural open space in areas important for regional conservation. These Preserves provide connectivity between the blocks of habitat that will allow Covered Species to adjust and move with changing habitats resulting through climate change.

Adaptive Management of Preserves: The Plan sets forth an adaptive management strategy (see Section 7.2.7 of the Plan) for management of the OCTA acquired Preserves. A specific line item has been included in the Plan funding analysis to address adaptive management issues over time. The Plan recognizes that management of Preserves and the protection of Covered Species and their habitat on the Preserves will most likely have to change over time with changing conditions. The adaptive management structure identifies threats and stressors (see draft conceptual models in Section 7.2.8 of the Plan) and the connections with natural drivers such as climate change.

Comment: The commenter recommends updating the Regulatory Setting section of the Air Quality and Greenhouse Gases chapter to reflect the new Council on Environmental Quality (CEQ) draft guidance that was released on December 14, 2014.

Response: The Regulatory Setting section of the Air Quality and Greenhouse Gases chapter has been updated in the Final EIR/EIS to reflect the new CEQ draft guidance that was released on December 14, 2014. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 6-6 Response

Comment: The commenter encourages the project proponents to use the proposed 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.

Response: The Plan recognizes that use of pesticides on the Preserves needs to be closely managed. In Section 7.2.5 of the Plan, the following guidelines are included

- Consider both mechanical and chemical methods of control. Only herbicides that are compatible with the biological goals and objectives will be used. A list of herbicides to be used within the Preserve will be provided in the RMP, which will be reviewed by the Wildlife Agencies. Licensed pest control advisors who are familiar with Department of Pesticide regulations will be used to make specific pest control recommendations.

Preserve-specific Resource Management Plans (RMPs) are being prepared for each Preserve. These plans will specify the types and conditions for herbicide and pesticide use and will require the coordination and approval by the United States Fish and Wildlife Service and the California Department of Fish and Wildlife.

For wildlife species management within the Preserves, the Plan states *“In general, the use of pesticides and rodenticides, release of any animal species, feeding of wildlife species, and collection or harassment of wildlife species—except as approved by the Wildlife Agencies for monitoring, management, or scientific/research studies—is prohibited in the Preserves.”* No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 7: Orange County Mosquito and Vector Control District – 2/6/15

From: Amber Semrow
To: OCTA NCCP HCP Comments
Subject: FW: OCTA NCCP/HCP Draft EIR/EIS
Date: Friday, February 06, 2015 4:59:11 PM
Attachments: [OCVCD Vector Reduction Manual.pdf](#)
[Appendix 1.PDF](#)

From: Amber Semrow
Sent: Friday, February 06, 2015 4:57 PM
To: 'OCTA NCCP HCP'
Subject: FW: OCTA NCCP/HCP Draft EIR/EIS

From: Amber Semrow
Sent: Friday, February 06, 2015 4:53 PM
To: 'comments@octa.net'
Subject: OCTA NCCP/HCP Draft EIR/EIS

Dear Mr. Phu,

Last year Orange County experienced the worst West Nile virus season to date. There were 282 human infections reported including seven deaths. The Orange County Mosquito and Vector Control District would like to emphasize the importance of proper project planning in preventing the spread of vector-borne diseases. Any project elements which create standing water above ground (i.e., created wetlands and infiltration/retention basins) or in below ground infrastructure (like sumps, storm drains, and treatment devices) should not hold water for more than 96 hours to avoid mosquito breeding conditions. Please ensure that all proposed freeway improvement projects, funded restoration projects and other elements of the OCTA NCCP HCP Draft EIR/EIS plan will minimize or avoid mosquito and vector production and harborage as described in our attached OCMVCD Vector Reduction Manual.

7-1

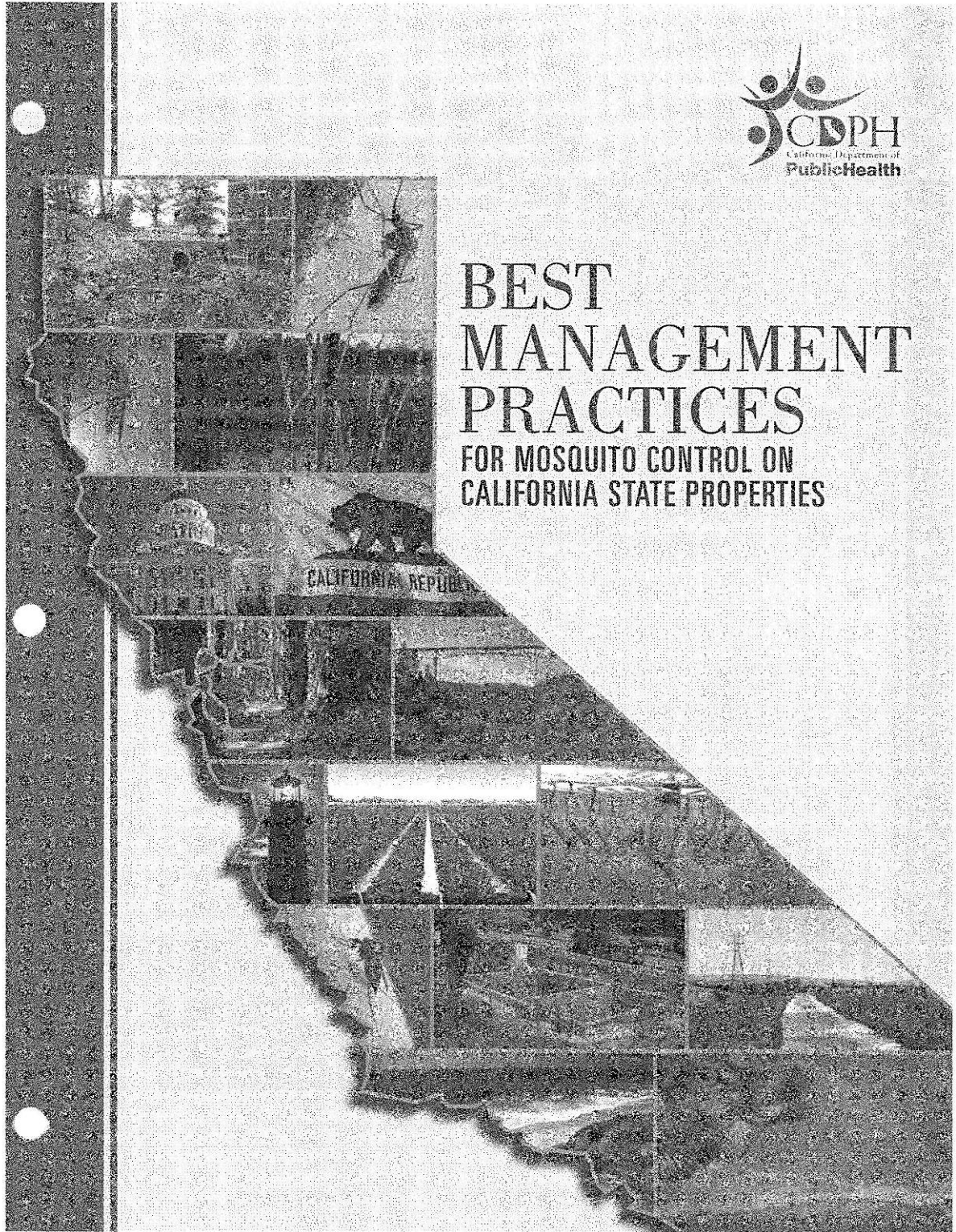
Here are some additional resources for your consideration of this important public health matter:

Best Management for Mosquito Control on California State Owned Properties
http://www.cdph.ca.gov/HealthInfo/discond/Documents/CDPHBMPMosquitoControl6_08.pdf

How Better Planning and Use of the California Environmental Quality Act Can Prevent Mosquitoes and Vector-Borne Diseases <http://www.mvcac.org/amg/wp-content/uploads/MVCAC-CEQA-White-Paper-and-Cover.pdf>

Thank you,

Amber Semrow
 Biologist
 Orange County Mosquito and Vector Control District
 13001 Garden Grove Boulevard
 Garden Grove, CA 92843-2102
 OFF: (714) 971-2421 x140
 FAX: (714) 971-0809
 E-mail: asemrow@ocvcd.org
 Website: www.ocvcd.org



TO DOWNLOAD AN ELECTRONIC VERSION, VISIT THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH WEBSITE AT [HTTP://WWW.CDPH.CA.GOV](http://www.cdph.ca.gov) (SEE PROGRAMS/VECTOR-BORNE DISEASE SECTION).

For more information, please contact:
Vector-Borne Disease Section
California Department of Public Health
(916) 552-9730
<http://www.cdph.ca.gov>
<http://westnile.ca.gov>

BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL ON CALIFORNIA STATE PROPERTIES

**BEST
MANAGEMENT
PRACTICES**
FOR MOSQUITO CONTROL ON CALIFORNIA STATE PROPERTIES

RECOMMENDATIONS OF THE
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH
JUNE 2008



ARNOLD SCHWARZENEGGER
GOVERNOR
STATE OF CALIFORNIA

KIMBERLY BELSHÉ
SECRETARY
CALIFORNIA HEALTH AND
HUMAN SERVICES AGENCY

MARK B HORTON, MD, MSPH
DIRECTOR
CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

ACKNOWLEDGEMENTS

EDITOR IN CHIEF

Carrie Nielsen, PhD, California Department of Public Health (CDPH)

COMMITTEE CHAIR

Vicki Kramer, PhD, CDPH

STEERING COMMITTEE MEMBERS

California Department of Fish and Game (DFG)

Dean Kwasny

California Department of Food and Agriculture (CDFA)

Duane Schnabel

California Department of General Services (DGS)

Phil Henderson; Joe Mugartegui; Joe White

California Department of Pesticide Regulation (DPR)

Patricia Matteson, PhD

California Department of Public Health (CDPH)

Claudia Erickson, MS; Tim Howard, MS; Renjie Hu, PhD; Stan Husted, MPH;
Jonathan Kwan, MS; Marco Metzger, PhD; Mark Novak, PhD

California Department of Transportation (Caltrans)

Karl Dreher, PE; Sheree Edwards; Bala Nanjundaiah

California State Parks (CSP)

Stephen Bakken

Mosquito and Vector Control Association of California (MVCAC)

David Brown, Sacramento-Yolo Mosquito and Vector Control District;
Steve West, Kenn Fujioka, PhD, San Gabriel Valley Mosquito and Vector Control District;
John Stroh, San Joaquin Mosquito and Vector Control District

University of California, Davis (UCD), Center for Vectorborne Diseases (CVEC)

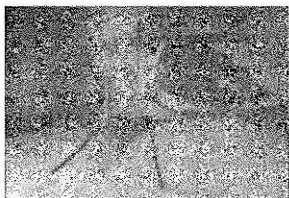
William Reisen, PhD

University of California, Riverside (UCR)

William Walton, PhD

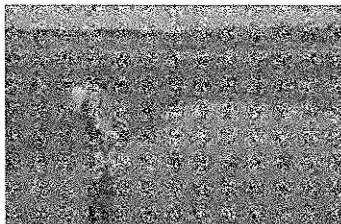
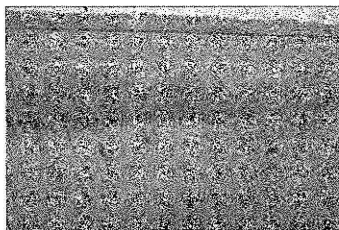
BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL ON CALIFORNIA STATE PROPERTIES

It is the responsibility of all agencies to protect public health by controlling mosquitoes on their property. Please refer to the section of this plan that pertains to your agency or property type and review the background information on mosquitoes and mosquito management.



Use this plan to identify and implement appropriate Best Management Practices (BMPs) to control mosquitoes.

Eliminate unnecessary standing water, reduce stagnation by providing water flow, and manage vegetation in ponds or other water bodies.



Collaborate with local vector control agencies to develop and implement appropriate integrated pest management (IPM) strategies that are most suitable for specific land-use type(s).

Ensure employees use personal protective measures when potentially exposed to adult mosquitoes.

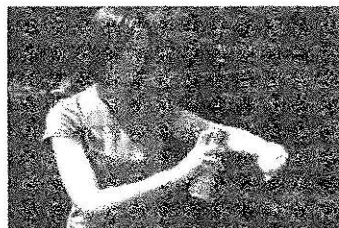


TABLE OF CONTENTS

EXECUTIVE SUMMARY AND RECOMMENDATIONS 1

INTRODUCTION 3

 West Nile Virus and Mosquito Control in California: An Overview 3

GENERAL BIOLOGY OF CALIFORNIA MOSQUITOES 5

 Mosquito Life Cycle 5

 Mosquitoes as Disease Vectors 6

 Mosquito Habitats of California 7

MONITORING MOSQUITO POPULATIONS AND MOSQUITO-BORNE DISEASES 9

 Mosquito Surveillance Techniques 9

 Larval Surveillance 10

 Adult Surveillance 10

 Virus Surveillance 10

BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL 11

 Integrated Pest Management 11

 Mosquito Control Practices 11

 Larval Control 12

 Adult Control 14

 Evaluation of the Efficacy of BMPs 16

 Personal Protective Measures 16

COORDINATION BETWEEN STATE AGENCIES AND LOCAL
MOSQUITO AND VECTOR CONTROL AGENCIES 17

 Local Vector Control Service Areas 18

BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL ON CALIFORNIA STATE PROPERTIES

RECOMMENDATIONS FOR STATE-OWNED PROPERTIES..... 19

 General Recommendations for Managers of State-Owned Properties20

 Buildings and Grounds21

 Department of Fish and Game24

 Wetlands24

 Department of Transportation.....29

 Stormwater Infrastructure.....31

 State Parks34

 Developed Areas35

 Wildlands–Undeveloped Areas.....36

 Conservancies.....37

REFERENCE39

 Sources Cited in the Document.....39

 List of Acronyms41

 Resources for Additional Information.....42

APPENDICES43

 Appendix A: Governor’s West Nile Virus Emergency Proclamation of August 2, 2007.....43

 Appendix B: Summary of State-Owned Properties by Agency.....46

 Appendix C: Key State Agency Responsibilities: WNV Surveillance and Control.....51

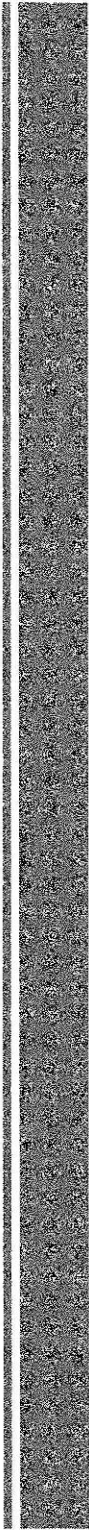
 Appendix D: Mosquitoes of California53

 Appendix E: Typical Larval Habitats of California Mosquitoes57

 Appendix F: Compounds Approved for Mosquito Control in California.....58

 Appendix G: Health and Safety Codes Pertinent to Mosquito Control.....62

 Appendix H: Additional Resources for Mosquito Control and Arbovirus Surveillance64



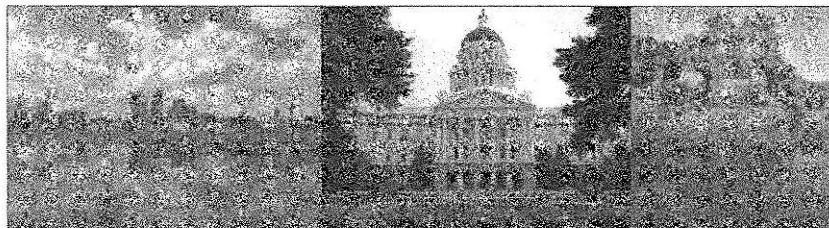
EXECUTIVE SUMMARY AND RECOMMENDATIONS

The California Department of Public Health (CDPH), in collaboration with Steering Committee members, developed this Best Management Practices (BMPs) plan to enhance early detection of West Nile virus (WNV) and promote mosquito control on state-owned properties in response to the Governor's Emergency Proclamation on August 2, 2007 (Appendix A). Order number 3 states:

IT IS FURTHER ORDERED that the Department of Public Health shall coordinate with the State and Consumer Services Agency, the Resources Agency and the Department of Food and Agriculture to develop a plan using best management practices for implementation by the appropriate state agencies for the early detection of West Nile virus on state-owned properties and appropriate mitigation and abatement measures.

This plan describes mosquito control BMPs to be implemented by the appropriate state agency. These recommended practices, when properly implemented, can reduce mosquito populations through a variety of means including: 1) reducing or eliminating breeding sites, 2) increasing the efficacy of biological control, and 3) increasing the efficacy of chemical control measures. It is critical that state agencies communicate regularly with local vector control agencies regarding control practices on state-owned properties that are located within or near a local agency's jurisdiction. Local vector control agencies may have more specific policies regarding the implementation of BMPs and other control operations on state lands, which may include use of enforcement powers authorized by the California Health and Safety Code.

This BMP plan for mosquito control on state-owned properties reflects input from the BMP steering committee members, and suggestions and comments from many additional stakeholders and representatives of state agencies that manage state-owned properties. There are many different BMPs included in this document and they are intended to provide overall guidance to reduce mosquito production on state-owned properties throughout California, though not all mosquito sources and land uses will be addressed in this document. If it is deemed necessary, site-specific BMP plans may be developed in collaboration with CDPH and the respective local mosquito and vector control agency.



BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL ON CALIFORNIA STATE PROPERTIES

Effective mosquito-borne disease surveillance and mosquito control to protect public health are dependent upon factors that may fluctuate temporally and regionally. Such factors include mosquito and pathogen biology, environmental factors, land-use patterns, resource availability, available mosquito control services, and institutional and legal constraints. Management strategies that incorporate BMPs are the most effective means by which mosquito control can be conducted and individualized to specific situations. Best management practices included in this plan emphasize the fundamentals of integrated pest management (IPM), which include:

1. Knowledge of mosquito species composition and corresponding mosquito behavior and habitat, for both immature and adult stages.
2. Detecting and monitoring WNV activity by testing mosquitoes, birds, sentinel chickens, horses, and humans. Identifying the mosquito species present, locations, densities, and disease potential.
3. Managing mosquito populations by source reduction, habitat modification, and biological control (e.g., introduced predators and parasites). Pesticides are used to target immature and, when indicated, adult stages of the mosquito. Mosquito control products are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment.
4. Educating the general population about reducing mosquito production and minimizing their risk of exposure to WNV.

RECOMMENDATIONS FOR MANAGERS OF STATE-OWNED PROPERTIES

- Use this plan to identify and implement appropriate Best Management Practices (BMPs) to control mosquitoes.
- Eliminate unnecessary standing water, reduce stagnation by providing water flow, and manage vegetation in ponds or other water bodies.
- Collaborate with local vector control agencies to develop and implement appropriate integrated pest management (IPM) strategies that are most suitable for specific land-use type(s).
- Ensure employees use personal protective measures when potentially exposed to adult mosquitoes.

INTRODUCTION

On August 2, 2007, the Governor of California issued a Proclamation of Emergency in response to rapidly escalating West Nile virus (WNV) activity and the commensurate threat to public health (Appendix A). Under the Emergency Proclamation the California Department of Public Health (CDPH), in coordination with the State and Consumer Services Agency, the Resources Agency and the Department of Food and Agriculture, developed this plan to be implemented by state agencies to enhance early detection and control of WNV on state-owned properties using Best Management Practices (BMPs).

BMPs describe land management practices intended to reduce mosquito populations by eliminating standing water, modifying habitat, enhancing natural predation on mosquito larvae, and using highly specific mosquito control products. BMPs are a fundamental attribute of an Integrated Pest Management (IPM) program, which combines chemical and non-chemical control measures to reduce populations of mosquitoes while minimizing the potential impacts to people, other organisms, and the environment. Most mosquito control programs in California adhere to IPM principles. Raising both community and land managers' awareness of mosquitoes and mosquito-borne diseases may increase the effectiveness of an IPM program. Also emphasized in IPM programs is the need to raise community awareness about the importance of using personal protective measures to reduce the risk of disease transmission.

The recommended BMPs in this plan should be implemented by the appropriate state agency, in conjunction with local mosquito control programs, to reduce mosquito production on state-owned properties throughout California. The various land use categories of state-owned properties in this plan include: 1) buildings and grounds, 2) managed and natural wetlands, 3) stormwater devices, 4) transportation infrastructure, 5) state parks, and 6) conservancies. CDPH provides consultation for selecting the best means for reducing mosquito production and can assist in coordinating activities with local vector control agencies. This assistance by CDPH may be especially necessary for state agencies that manage lands that are not within the jurisdiction of an established mosquito control program. Appendix B provides a summary of state-owned properties and management agencies.

WEST NILE VIRUS AND MOSQUITO CONTROL IN CALIFORNIA: AN OVERVIEW

WNV is a potentially serious illness. The vast majority of human infections (approximately 80%) go unnoticed due to mild or nonexistent symptoms; however approximately 20% of infected individuals will develop West Nile fever. Symptoms of West Nile fever may include fever, head and body aches, nausea, vomiting, swollen lymph glands, and skin rash on the chest, stomach, and back. Within this group, about one in 150 people will develop a more serious form of illness with symptoms such as high fever, headache, neck stiffness, stupor,

BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL ON CALIFORNIA STATE PROPERTIES

disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness, and paralysis. This severe form of infection with WNV may result in long-lasting, debilitating physical disorders and can be fatal in certain people, particularly the elderly.

WNV is an avian pathogen that is maintained in nature in a bird-mosquito-bird transmission cycle. Occasionally, the virus is carried outside this natural cycle and causes disease in humans and other animals. The primary agents (i.e. vectors) responsible for spreading the virus between animals are mosquitoes. Female mosquitoes become infected with virus after taking a blood meal from a bird with high "viremia" defined as the presence of large quantities of virus in the blood. The virus replicates quickly over a period of days and spreads throughout the body of the mosquito. These infected mosquitoes inject contaminated saliva into the skin of animals each time they attempt to take more blood.

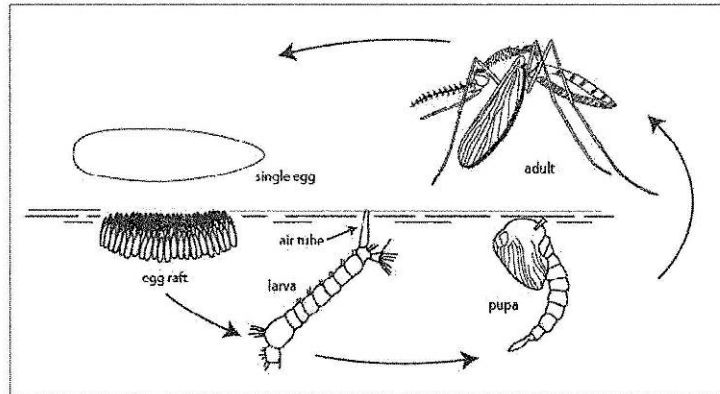
CDPH, local health departments, and mosquito and vector control agencies have the important responsibility of protecting the public from mosquito-borne diseases. These agencies work collaboratively to minimize the risk of mosquito-borne disease transmission through comprehensive mosquito surveillance and control efforts, by providing technical guidance and information to the medical and veterinary communities, and by educating the public about mosquitoes, the diseases they carry, and personal protective measures.

California has a long history of mosquito-borne disease occurrence, including outbreaks of malaria, western equine encephalomyelitis (WEE), and St. Louis encephalitis (SLE). Mosquito control programs were first developed in the early 1900s to combat these diseases and reduce populations of nuisance mosquitoes. Today there are more than 70 local agencies throughout California that provide mosquito and vector control services. Together, these agencies serve more than 85% of California's residents over an area of approximately 60,000 square miles, representing one of the most comprehensive public health programs in the world.

A mosquito-borne disease surveillance program has been ongoing in California since 1969. To prepare for the introduction of WNV into California, CDPH, in conjunction with state and local partners, modified and expanded the program in 2000. The newly developed surveillance and response plan for WNV in California includes procedures to monitor for and reduce the risk of disease due to WNV. In 2003, WNV was detected for the first time in southern California, and by 2004 WNV was detected in all 58 California counties. Through 2007, a total of 2,318 human WNV cases were reported of which 55 were fatal. Up-to-date information on WNV in California can be found on the CDPH WNV website: <http://westnile.ca.gov>.

INTRODUCTION

GENERAL BIOLOGY OF CALIFORNIA MOSQUITOES



THE LIFE CYCLE OF ALL MOSQUITO SPECIES CONSISTS OF FOUR STAGES: EGG, LARVA, PUPA AND ADULT. FIGURE FROM: WWW.UCMRP.UCDAVIS.EDU/

MOSQUITO LIFE CYCLE

Mosquitoes are found throughout most of California and can be a public health and veterinary health threat. Female mosquitoes take a blood meal by inserting their needle-like mouthparts into the skin, injecting saliva, and drawing out blood. Mosquito bites frequently cause skin irritation in humans. Thus in the absence of disease, mosquitoes can also be a significant nuisance. Each mosquito species has a Latin or Greek-based scientific name and the more well-known species also have common names that describe their habits, biology, or appearance (e.g., pasture mosquito, tree-hole mosquito).

The life cycle of a mosquito consists of four stages: egg, larva, pupa, and adult. The immature stages are completed in standing water. Depending on species, females will lay their eggs either singly or in clusters. Some species will deposit their eggs on the surface of calm water, whereas others deposit their eggs on land in areas subject to flooding. Free-swimming larvae hatch in water and feed on organic matter and microorganisms such as bacteria. During growth, the larva molts (casts its skin) four times; the stages between successive molts are known as instars. The pupa is a non-feeding stage of several days duration, undergoing morphological and physiological changes required to transform from larva to adult. Seasonal and environmental conditions determine the length of time it takes for larval mosquitoes to complete their development; some species develop faster than others under the same conditions. Depending on average temperatures, it may take from four days to a month for the mosquito to mature from egg to adult; with warmer temperatures development accelerates. Only female mosquitoes require meals of blood and most live for about two weeks, although some

BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL ON CALIFORNIA STATE PROPERTIES

may survive two to three months. Adult females that emerge late in the season may hibernate through the winter to begin laying eggs in the spring. Adult male mosquitoes feed on nectar or plant juices and are very short lived by comparison.

Over 160 mosquito species in 13 genera are found in North America. California encompasses a diverse range of habitats and ecology; at least 52 species of mosquitoes are known to occur. The majority of these species fall within four major groups or genera: *Aedes*, *Anopheles*, *Culiseta*, and *Culex*. Please see Appendix D for more information on the biology of these genera and key mosquito species.

MOSQUITOES AS DISEASE VECTORS

Mosquitoes are the most important insect vectors of disease worldwide, causing millions of human deaths every year. Mosquito-borne pathogens are transmitted when a female mosquito pierces the skin of an animal to feed on blood; however, not all mosquito species are 'competent' vectors (i.e., capable of becoming infected, replicating the virus, and transmitting the virus); however, each species' capacity as a vector varies.

Of 12 mosquito-borne viruses currently recognized in California, only WNV, WEE, and SLE are significant threats to public health. However, increasing global trade and travel provides an avenue for introducing and/or re-introducing other mosquito-borne pathogens and their vectors into California and the United States. The diseases of greatest concern include Japanese encephalitis, dengue, yellow fever, Rift Valley fever, chikungunya, Venezuelan encephalitis, and malaria.

ENCEPHALITIS

Several mosquito-borne viruses that occur in California can cause encephalitis. The majority of humans infected with these viruses have no symptoms. Those individuals with so-called mild symptoms can still have significant illness and face prolonged recovery, and severe cases can be fatal or cause permanent neurological damage. There are several species of mosquitoes in California that can transmit WNV, SLE, and WEE viruses to people and animals. The most important species belong to the group *Culex*. Specifically *Cx. tarsalis*, *Cx. pipiens*, and *Cx. quinquefasciatus* are significant public health concerns because of their widespread distribution throughout the state, their proximity to humans, and their capacity as very efficient vectors.

MALARIA

Malaria is caused by four species of protozoa. The parasites destroy red blood cells causing severe fever and anemia. Left untreated, malaria can cause kidney failure, coma, and death.

Malaria was once a common public health threat in California and much of the southern United States, but it was eradicated by intensive mosquito control efforts and the discovery of anti-malarial drugs. However, the disease still occurs in many other countries worldwide, creating a perpetual risk of re-introduction, especially from infected travelers and immigrants. The *Anopheles* mosquitoes capable of transmitting malaria still occur in many areas of California.

CANINE HEARTWORM

Canine heartworm occurs worldwide. It is caused by a filarial nematode transmitted by *Aedes* mosquitoes that can infect domestic dogs, wild canines (e.g., foxes, coyotes, wolves), and cats. The tiny worms migrate through the body to the heart and cause thickening and inflammation of the heart, which can lead to difficulty in breathing, chronic cough, and vomiting, and can sometimes be fatal.

NUISANCE PESTS

Many species of mosquitoes are not important as vectors of disease, but can cause serious injury and discomfort to humans and animals. Each time a female mosquito pierces the skin to take blood, she contaminates the wound with her saliva, creating the potential for a mild allergic reaction. The common symptom of mosquito bites is irritated and swollen skin surrounding the bite with persistent itching for several days. Scratching these bites to alleviate the itching can result in secondary bacterial infections. In addition, when mosquito populations explode, the sheer number of mosquitoes attempting to bite can make life miserable.

MOSQUITO HABITATS OF CALIFORNIA

Mosquitoes thrive in a wide variety of ecosystems and habitat types, from the subarctic to the tropics and from alpine to desert regions. California's diverse habitats support over 50 species of mosquitoes, each with specific requirements for larval development.

Environmental factors that mosquitoes use when selecting a site to lay eggs include shade or sun exposure, standing or flowing water, salt content, presence of vegetation, and organic content. Examples of natural mosquito breeding sites include fresh and saltwater marshes, lakes, ponds, intermittent creeks and streams, flooded riparian corridors, sloughs and seasonal wetlands, snow-melt pools, and treeholes. Examples of artificial sites include stormwater detention basins, wastewater ponds, flood control basins and channels, spreading grounds, street drains and gutters, wash drains, roadside ditches, animal troughs, tires, fountains, artificial containers, ornamental fish ponds, swimming pools, and various areas that surround residential or commercial buildings. Additional information on the larval habitats of California mosquitoes is provided in Appendix E.

PERMANENT AND SEMI-PERMANENT WATERS

A variety of habitats with permanent, semi-permanent, or seasonal sources of standing water are suitable for mosquito larvae, particularly those in the *Anopheles*, *Culex*, and *Culiseta*

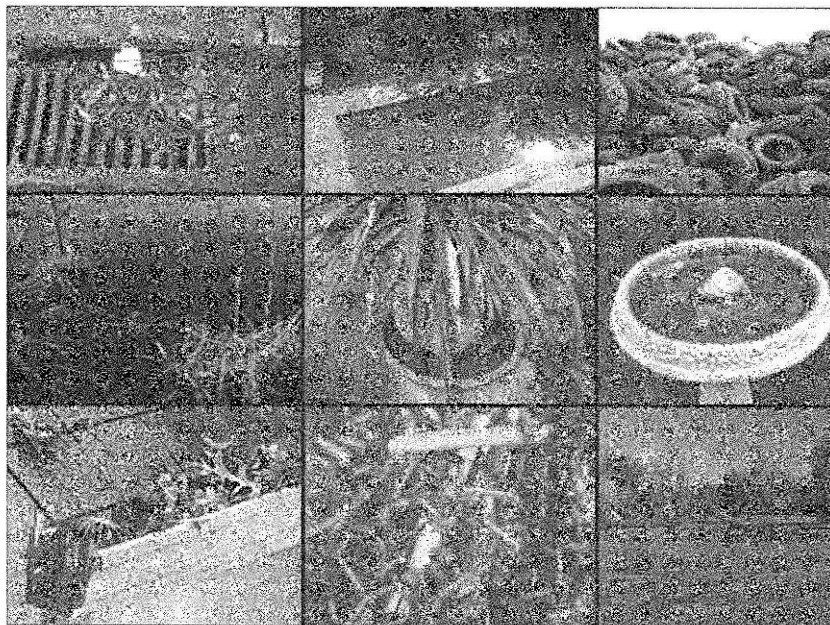
BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL ON CALIFORNIA STATE PROPERTIES



genera. Examples include artificial containers, treeholes, catch basins, open ditches, retention/detention ponds, ponds and wetlands, still waters along the borders of flowing streams, irrigation ditches with vegetation, tree holes, semi-permanent ponds and wetlands. These sources of water can be found in highly urban areas or undeveloped land and often support multiple generations of mosquitoes each season. In warmer climates, urban sources can produce some species of mosquitoes year round.

INTERMITTENT WATERS

Areas that are intermittently or seasonally flooded are the preferred habitat for *Aedes* mosquitoes. Some *Aedes* can develop from egg to adult in four days. Water that stands for more than 96 hours can support *Culex* mosquitoes as well. Irrigated pastures, rice fields, seasonally flooded duck clubs, tidal wetlands, and snowmelt pools are some examples of intermittent or seasonally flooded habitats. These sources of water can be among the most productive sources of mosquitoes because they are often free of natural predators.



GENERAL BIOLOGY OF CALIFORNIA MOSQUITOES

SECTION 9. GENERAL BIOLOGY OF CALIFORNIA MOSQUITOES

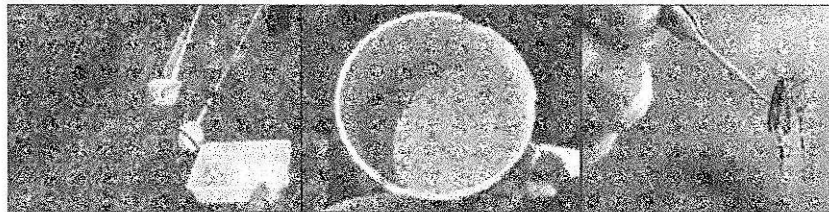
MONITORING MOSQUITO POPULATIONS AND MOSQUITO-BORNE DISEASES

In 2000, CDPH collaborated with the University of California, Davis, the California Department of Food and Agriculture, local mosquito and vector control agencies, and other state and local agencies to develop a comprehensive statewide surveillance program to monitor WNV activity. More than 70 local mosquito and vector control districts and agencies, environmental health agencies, and county public health departments throughout California routinely contribute to the program. Surveillance includes testing for WNV infections in humans, horses, mosquitoes, wild birds, and “sentinel” chicken flocks located throughout California. The program also includes testing dead birds reported by the public for infections with WNV. A special website (<http://www.westnile.ca.gov>) and toll-free hotline (877-WNV-BIRD) were created and maintained by CDPH to support this surveillance program. The information from the program allows CDPH to identify conditions conducive to WNV transmission and areas with elevated risk. This information is provided to local mosquito control agencies so the threat to public health is mitigated to the best of their ability.

Monitoring mosquito populations and mosquito-borne disease levels provides the necessary data to make informed management decisions at the state and local level. IPM programs rely on surveillance data to direct control operations including the use of BMPs.

MOSQUITO SURVEILLANCE TECHNIQUES

Collecting baseline data on mosquito populations and mosquito-borne disease helps target educational efforts and is essential to evaluate control efforts. Thresholds established through a collaborative effort between local mosquito and vector control agencies, CDPH, and other state agencies determine when mosquito populations are controlled. The likelihood of reducing mosquito breeding sites, the level of control desired by those in the area, public safety, land use type, and funding are used to establish treatment thresholds. These thresholds minimize the risk of disease and public nuisance.



BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL ON CALIFORNIA STATE PROPERTIES

SECTION 9. MONITORING MOSQUITO POPULATIONS AND MOSQUITO-BORNE DISEASES
10

LARVAL SURVEILLANCE

Larval surveillance involves routine sampling of aquatic habitats for developing mosquitoes. The primary tool is the “dip count” which indicates whether a habitat is suitable and also estimates larval density. A one-pint cup attached to a long handle is used to collect a standard volume of water (“dip sample”). The “dip count” may be expressed as the number of immature (larvae and pupae) mosquitoes per dip, per unit volume, or per unit surface area of the site.

ADULT SURVEILLANCE

Several types of traps are used for adult surveillance since mosquitoes are attracted to different traps depending on their species, sex, and physiological condition. The most common traps use light, carbon dioxide, water for egg laying, and a resting area. Trapped adults provide information about local distribution, density, and identity. The size of an adult mosquito population can also be assessed by the number and distribution of service requests from the public. Data are used to help locate new sources of mosquitoes or known sources with a recurrent problem.

VIRUS SURVEILLANCE

Detecting antibodies to WNV in “sentinel” chicken flocks, equine cases, and testing dead birds and adult mosquitoes for infections are all used to determine whether WNV is being transmitted in an area. Several species of mosquitoes are routinely tested for the presence of WNV; testing of *Culex* is emphasized. Trapped females are identified and separated into pools of ≤ 50 females each by local vector control agencies. The “pools” are tested at the University of California at Davis, Center for Vectorborne Diseases (CVEC) with the polymerase chain reaction (PCR), to detect the presence of WNV, SLE, and/or WEE. Some local mosquito and vector control agencies also test mosquitoes for virus in their laboratories. Although generally less sensitive than sentinel chickens, mosquito infections may be detected earlier in the season than chicken seroconversions and therefore provide an early warning of virus activity. Information on the status of mosquito-borne encephalitis virus is disseminated to all mosquito control agencies in the state in a weekly summary sent out by CDPH.

BEST MANAGEMENT PRACTICES FOR MOSQUITO CONTROL

BMPs for mosquito control refer to the implementation of appropriately-chosen mosquito control practices as part of multi-disciplinary programs designed to ensure effective and efficient control of mosquitoes with the least possible environmental cost. Cost, personnel constraints, access to mosquito sources, potential impacts on non-target species or habitat, and adverse effects on wildlife, including threatened and endangered species and permitting requirements, may limit whether mosquito management practices are implemented.

INTEGRATED PEST MANAGEMENT

IPM is a comprehensive approach for managing populations of pests with an array of complimentary methods which include biological control, preventive cultural practices, and strategically using pesticides. IPM of mosquitoes focuses on controlling larvae to suppress adult populations. The core components of mosquito IPM are 1) surveillance for mosquito larvae and adults, 2) establishing action thresholds, 3) selecting appropriate control strategies such as habitat modification, using natural predators, and applying pesticides, and 4) providing education programs. Implementing an IPM program is determined by factors such as habitat type, existing animals and plants, permitting requirements, and the target species of mosquitoes. When properly executed, IPM is an effective, environmentally sensitive, and cost-effective approach to managing mosquito populations.

MOSQUITO CONTROL PRACTICES

More than 70 local agencies including mosquito and vector control districts, environmental health departments, and county health departments actively engage in mosquito control and/or surveillance in California. Personnel from these agencies are certified by CDPH and are trained to control mosquitoes safely and effectively using IPM. Source reduction (i.e., minimizing mosquito breeding areas) is the most effective preventive action because it reduces the habitat available for larval development; however, other modifications of habitat and/or water management can be equally successful. Biological control agents, including native or introduced predators, are often combined with water management practices. Pesticides specific for controlling larvae or adults are used when preventive methods are not possible or unsuccessful.

Compounds currently approved for larval and adult mosquito control in California are listed in Appendix F. Health and Safety (H&S) Codes [Sections 2060-2067, 100170, and 100175] regulate mosquito control practices in California, and are briefly summarized in Appendix G.

LARVAL CONTROL

Larval control is the foundation of most mosquito control programs. Whereas adult mosquitoes are widespread in the environment, larvae must have water to develop; control efforts therefore can be focused on aquatic habitats. Minimizing the number of adults that emerge is crucial to reducing the incidence and risk of disease. The three key components of larval control are environmental management, biological control, and chemical control.

ENVIRONMENTAL MANAGEMENT

Manipulating or eliminating potential mosquito breeding sources can provide dramatic reductions in mosquito populations. There are three levels of environmental management.

1. SOURCE ELIMINATION

This approach completely eliminates potential habitats for mosquitoes. This strategy is generally limited to artificial habitats created by urbanization. Examples of source elimination include emptying or over-turning containers holding water, filling in holes containing water with sand or gravel, cleaning drainage ditches of debris, and covering structures and vessels that could hold water.

2. SOURCE REDUCTION

This strategy aims to alter and sometimes eliminate available habitat for larvae which substantially reduces mosquito breeding and the need for repeatedly applying pesticides. Unlike source elimination, standing water may exist but the total amount of water, or the time the water is left standing, is greatly reduced. Source reduction may require some maintenance (see below) to prevent further mosquito breeding. Examples of source reduction include limiting the growth of emergent vegetation in wetlands and ponds, constructing drainage ditches to remove water from areas prone to flooding, and clearing stormwater channels of silt and debris. Routine larval monitoring can indicate whether these efforts are effective or need further action.

3. SOURCE MAINTENANCE

When eliminating or significantly altering mosquito breeding sources is prohibited and/or inappropriate, reducing the number of sheltered, predator-free habitats while having minimal impact on the surrounding environment can make an area unsuitable for mosquitoes. Source maintenance can include water management, vegetation management, wetland infrastructure maintenance, and wetland restoration. Strategic, focused plans must be developed for each site.

BIOLOGICAL CONTROL

Biological control uses predators, parasites, or pathogens to reduce populations of mosquito larvae and is often combined with environmental management to enhance results. Although many animals will opportunistically consume mosquito larvae, they rarely occur in populations that are significant. As a result, mosquito control agencies stock select predators and/or modify habitats, where appropriate, to create situations that favor predators over mosquito larvae. Several biological control agents can decrease mosquito larvae populations (e.g., mosquito-eating fish, parasitic nematodes, crustaceans such as “tadpole shrimp” and copepods, and dragonfly nymphs). Each can control mosquitoes in certain conditions and/or environments, but fish are the most widely used and successful.

The mosquitofish *Gambusia affinis* has been used to control mosquitoes in California since 1921 and is the most widely used biological control agent in the world. These small fish are effective against mosquito larvae because they grow and reproduce rapidly, feed at the water surface where mosquito larvae are found, and tolerate a wide range of temperature and water quality. Other fish that are used with mixed success include guppies, sticklebacks, river perch, and chubs. Fish are most effective in permanent ponds and wetlands, but are also used in rice fields and stormwater canals with permanent water. Many local mosquito control agencies propagate mosquito-eating fish; however, cost, habitat type, and regulatory exclusion from sensitive habitats limits where they may be distributed.

CHEMICAL CONTROL

Pesticides that control mosquito larvae are called larvicides. Four types of larvicides (bio-rational, surface oil, growth regulating, and chemical products) encompassing seven active ingredients are registered for use in California. Larvicides are applied by hand, from hand-held or vehicle-mounted engine-driven blowers, or by aircraft, depending on the product, the formulation, and the target habitat. Applicators of any of these products must be certified by the CDPH.

1. BIO-RATIONAL PRODUCTS

Bio-rational products exploit insecticidal toxins found in certain naturally occurring bacteria. These bacteria are cultured in mass and packaged in various formulations. The bacteria must be ingested by mosquito larvae so the toxin is released. Therefore bio-rational products are only effective against larvae since pupae do not feed. The bacteria used to control mosquito larvae have no significant effects on non-target organisms.

Two products that are used against mosquito larvae singly or in combination are *Bacillus thuringiensis israelensis* (Bti) and *Bacillus sphaericus* (Bs). Manufactured Bti contains dead bacteria and remains effective in the water for 24 to 48 hours; some slow release formulations provide longer control. In contrast, Bs products contain live bacteria that in favorable conditions remain effective for more than 30 days. Both products are safe enough to be used in water that is consumed by humans.

2. SURFACE AGENTS

Mosquito larvae and pupae breathe through siphons that extend above the water surface. Surface agents such as highly refined mineral oils or monomolecular films (alcohol derivatives) can spread across the entire surface of the water and prevent mosquitoes from breathing. Depending on the product, the film may remain on the water's surface from a few hours to a few days. Surface films are the only available products that are effective against fully developed larvae and pupae. Using surface agents may be restricted in sensitive habitats or where runoff may enter sensitive habitats.

3. INSECT GROWTH REGULATORS

Insect growth regulators (IGRs) disrupt the physiological development of larvae thus preventing adults from emerging. The two products currently used for controlling mosquito larvae are methoprene and diflubenzuron.

The effective life of these products varies with the formulation. Methoprene can be applied in granular, liquid, pellet, or briquette formulation. Diflubenzuron is used selectively because it may be toxic to non-target aquatic invertebrates. There are no such restrictions to using methoprene. IGRs for mosquito control can be used in sources of water that are consumed by humans.

4. CHEMICAL LARVICIDES

Chemical pesticides are rarely used to control mosquito larvae. Organophosphate larvicides are used infrequently because of their negative impacts on non-target organisms and the environment. Temephos is currently the only organophosphate registered for use as a larvicide in California. This product can be safely and effectively used to treat temporary water or highly polluted water where there are few non-target organisms and/or livestock are not allowed access. The efficacy of temephos may be up to 30 days depending on the formulation.

ADULT CONTROL

Adult mosquitoes can only be controlled with pesticides, known as adulticides. Many mosquito control programs in California include adulticiding as an integral component of their IPM program. Adulticiding falls into two categories—barrier applications and ultra-low volume (ULV) applications. Barrier applications target resting mosquitoes by applying pesticides to vegetation and structures. Barrier applications are typically applied on small properties.

ULV applications are used to control adult mosquitoes over large areas. Tiny oil or water droplets carrying an “ultra-low volume” of insecticide (usually not exceeding two ounces per acre) are emitted from specialized equipment mounted to trucks or aircraft. The droplets kill adult mosquitoes on contact. ULV applications are made after sunset or before sunrise to

Adult mosquitoes are controlled when action levels or thresholds are reached or exceeded. Thresholds are based on local sampling of the adult mosquito population and/or when the risk of mosquito-borne disease increases above levels established by the statewide WNV Surveillance and Response Plan. Thresholds are an integral component of mosquito control because they provide a range of predetermined actions based on quantified data. Thresholds also establish expectations and boundaries for responses that ensure appropriate mosquito control activities are implemented timely. The threshold for adult mosquito control depends on several factors including:

- How local citizens tolerate nuisance mosquitoes by evaluating public service requests.
- Overall mosquito abundance.
- Presence of mosquito-borne disease in the region.
- Abundance of mosquito species that are vectors of disease.
- Local acceptance of adult mosquito control activities.
- Climate data.

coincide with the time that mosquitoes are most active, when non-target insects are least active, and when temperature inversions are most likely to occur. These applications are considered when mosquito populations must be reduced immediately to halt disease transmission. Multiple applications are usually required for successful reduction of mosquito numbers.

Adverse effects from ULV applications are rare; however, people with health problems should be aware when and where the applications are being conducted. This information can be obtained by contacting the local vector control agency. Chemicals currently registered for ULV applications against mosquitoes in California (as of December 2007) include organophosphates (e.g., malathion and naled), pyrethrins (e.g., pyrethrum), and pyrethroids (e.g., resmethrin, sumithrin, and permethrin). Formulations of both pyrethrins and pyrethroids include the synergist piperonyl butoxide (PBO), which increases their activity against mosquitoes.

1. ORGANOPHOSPHATES

Malathion and naled are neurotoxins. Malathion is typically used early and late in the season.

2. PYRETHRINS

Pyrethrins are natural insecticides derived from chrysanthemum flowers. Adult mosquitoes are rapidly paralyzed and killed on contact. Pyrethrins are degraded rapidly by sunlight and chemical processes. Residual pyrethrins from ULV applications typically remains less than one day on plants, soil, and water.

location or land-use type. When existing data or current sampling methods are not sufficient, a specific plan should be developed with the local mosquito and vector control agency. Factors such as treatment costs, proximity to densely populated areas, mosquito-borne disease activity, species present, treatment options, and ability to collaborate with local vector control agencies should be considered when evaluating the best approach for a particular location. After BMPs have been implemented, they should be continuously evaluated. Surveillance for potential sources of mosquitoes and mosquito-borne virus transmission should be ongoing.

Individuals can help protect themselves from mosquitoes and mosquito-borne diseases by following some basic guidelines. The fundamental protective measures include: 1) applying mosquito repellents when outdoors, especially between dusk and dawn when mosquitoes are most active, 2) wearing protective clothing, and 3) maintaining fine mesh screens on windows and doors to prevent adult mosquito entry into homes.

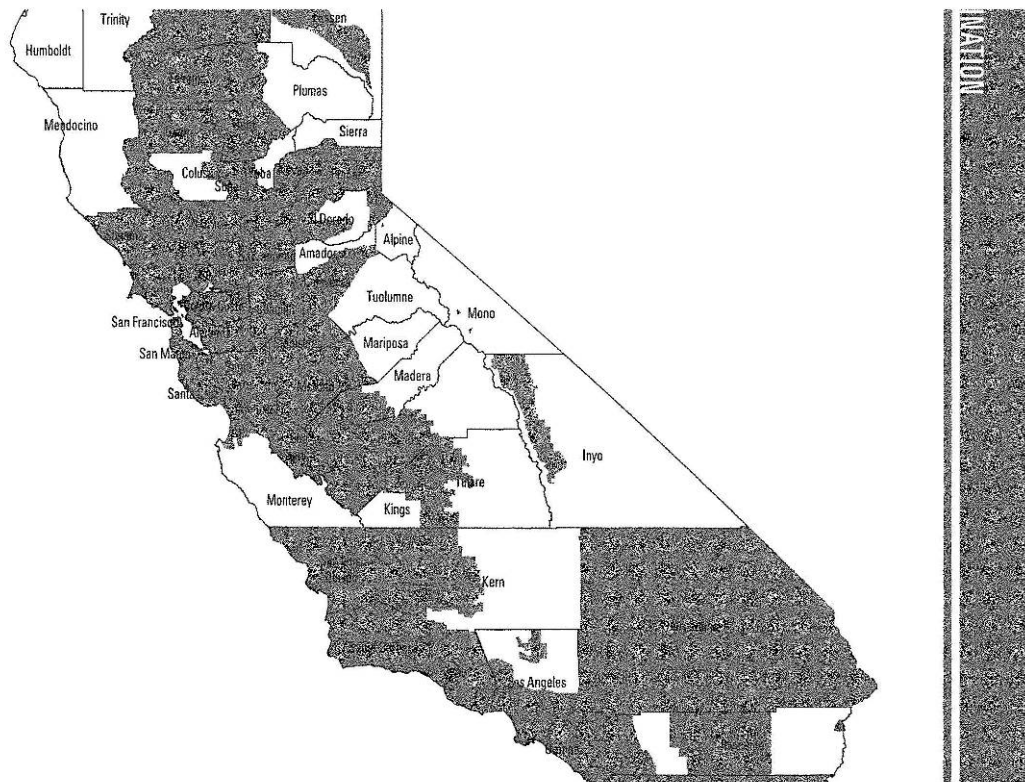
PERSONAL PROTECTIVE MEASURES

The most commonly used mosquito repellents contain the active ingredient DEET (N,N-diethyl-meta-toluamide), which has been formulated and sold under a variety of trade names. Repellents are available in a variety of concentrations and are formulated as aerosol sprays (most commonly at 15%), lotions, and solids (up to 100%). Spray repellents can be used on outer clothing as well as sparingly on the skin to ensure complete coverage. Repellents should not be used under clothing. The percentage of DEET in the repellent reflects the approximate length of time the product will repel mosquitoes (e.g., 23.8% DEET = about five hours of protection, 20% = about four hours, and 6.6% DEET = about two hours). Products must be used according to their labels. Repellents that contain oil of lemon eucalyptus and picaridin

Areas in California that are not within the jurisdiction of an established mosquito control program should coordinate with the closest mosquito and vector control agency or health department. Agencies with land holdings that are not in the jurisdiction of an established mosquito and vector control agency should consult the CDPH's West Nile Virus Preparedness Checklist for Regions without Organized Mosquito Control. This can be found at: <http://www.westnile.ca.gov/resources.php>

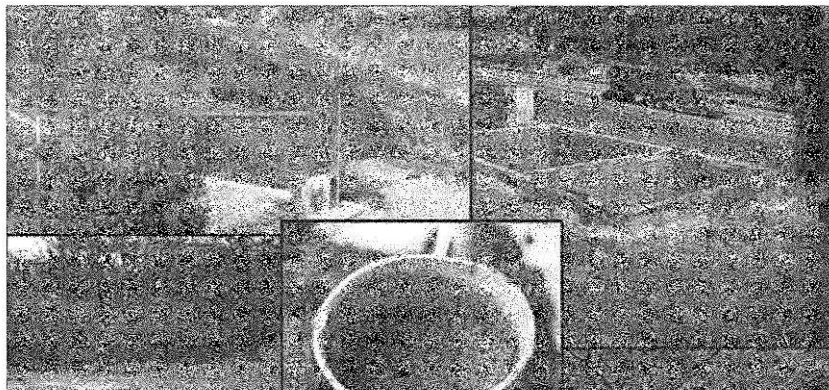
Each state agency should develop a cooperative agreement with a local mosquito and vector control agency that includes identifying areas that produce mosquitoes, coordinating control activities, and developing and monitoring the most effective BMPs. The state agency is responsible for providing reasonable access for mosquito control, monitoring, and implementing BMPs. Shorelines must be accessible for regular control of emergent vegetation and populations of mosquitoes.

ALTERNATE PATHS FOR MOSQUITO CONTROL



management tool for the State's property.

The 44 state entities identified as agencies managing state-owned properties are listed in Appendix B. Agencies within the State of California with major land holdings include: California State Parks, Department of Water Resources, California State University, University of California, Department of Forestry and Fire Protection, State Lands Commission, Department of Corrections and Rehabilitation, Department of Transportation, and the Department of Fish and Game. The responsibilities of individual state agencies are further explained in Key Agency Responsibilities (Appendix C).



RECOMMENDATIONS FOR STATE-OWNED PROPERTIES

- GENERAL RECOMMENDATIONS FOR MANAGERS OF STATE-OWNED PROPERTIES**
- Coordinate with local mosquito control agencies to monitor mosquito populations and WNV.
 - Collaborate with mosquito control professionals to establish the treatment threshold of mosquito populations based on facts related to local health, public safety, and economics.
 - Identify and implement BMPs most appropriate for the land-use type, resource availability, WNV risk, and mosquito populations.
 - Coordinate any BMP implementation with the local mosquito and vector control agency.
 - Ensure mosquito control staff has permanent access and permission to survey standing water for mosquito production and apply control measures.
 - Use IPM (biological, mechanical, cultural, microbial, biochemical, and chemical control) to actively control mosquitoes while considering human health, ecological impact, feasibility, and cost effectiveness.
 - Eliminate artificial mosquito breeding sites.
 - Ensure that all surface water is gone within four days (96 hours) to prevent mosquito breeding.
 - Control plant growth in ponds, ditches, and shallow wetlands.
 - Design facilities and water conveyance and/or holding structures to minimize the potential for producing mosquitoes.
 - Use appropriate bio-rational control measures to control mosquito larvae.

Mosquito breeding can be minimized by taking precautions such as inspecting and maintaining the property and regularly removing standing water.

GENERAL MOSQUITO MANAGEMENT GUIDELINES

1. Basic information about mosquitoes and simple measures that minimize mosquito breeding habitats should be provided to managers of buildings and grounds. This information should include guidance on eliminating artificially created mosquito breeding sites, properly managing water features, taking personal protection measures, and contacting local and state agencies responsible for mosquito control. A variety of educational brochures are available from CDPH (see <http://westnile.ca.gov>). Local mosquito and vector control agencies can also provide technical guidance or assistance.
2. Measures to reduce mosquito breeding near buildings and grounds begin with evaluating places where water is present or may accumulate. Minimizing sources of standing water is most effective if begun in the early spring and continued through fall as needed. Inspections should be performed at least weekly or more frequently after rain, particularly during warm weather. Water should not stand for more than 96 hours. Emergent vegetation and debris that can clog gutters and accumulate in the water should be removed.
3. When sources of standing water are too large to be managed properly, the local mosquito and vector control agency should be consulted.

SPECIFIC MOSQUITO REDUCTION GUIDANCE

- Clean and chlorinate swimming pools. Keep unused pools empty and dry.
- Minimize sites mosquitoes can use for refuge by thinning branches, trimming and pruning ornamental shrubs and bushes, and keeping grass mowed short.

MANAGE SPRINKLERS AND IRRIGATION SYSTEMS

Overwatering, broken components, and poorly designed irrigation systems in landscaping, parks, and irrigated pastures and fields commonly create standing water that can produce mosquitoes.

- Avoid over-irrigating to prevent excess pooling and runoff.
- Back-fill low-lying areas that hold water for more than 96 hours.
- Improve drainage channels and grading to minimize potential for standing water.
- Design new irrigation systems to increase water efficiency.
- Keep drainage ditches free of excessive vegetation and debris to provide rapid drainage, but retain ground cover to prevent soil loss.
- Reduce seepage as much as possible by repairing ditches and drains.
- Check outdoor faucets and sprinklers and repair any leaks or broken components.
- Report any evidence of standing water to responsible maintenance personnel.

IRRIGATED PASTURES AND AGRICULTURAL FIELDS

Flood irrigation is always a risk for producing mosquitoes. The following recommendations have been adapted from Lawler and Lanzaro 2005.

- Eliminate standing water from pastures and fields. Fields may need to be graded to allow for proper drainage, efficient water flow, and to reduce low-lying areas where standing water may accumulate. Low-lying areas should be filled or leveled accordingly.
- Reuse wastewater through return flow systems to effectively minimize mosquito production and conserve water. Eliminate and reuse excess water that may typically stagnate and collect

local mosquito control agencies. However, their use is restricted in natural bodies of water or in water features that drain into natural bodies of water. Land managers must consult with the local mosquito control agencies regarding proper use of mosquitofish or other available biological control agents.

PERSONAL PROTECTIVE MEASURES

- Provide visitors and guests with information regarding the risk of mosquito-borne disease transmission and personal protective measures.
- Install and maintain tight-fitting window and door screens on buildings.
- If possible, minimize outdoor activities at dawn and dusk when mosquitoes are the most active.
- Wear protective clothing such as long sleeved shirts and long pants when going into mosquito-infested areas.
- Use mosquito repellent when necessary, carefully following the directions on the label.

WETLANDS

Wetlands are the primary source of mosquito production on DFG-managed lands. Under the California Wildlife Protection Act, the term “wetlands” is defined as any lands which may be covered periodically or permanently with shallow water, which include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, fens, and vernal pools (Fish & Game Code Section 2785). There are five major classifications of wetlands: marine, estuarine, lacustrine, riverine, and palustrine. Marine and estuarine wetlands are associated with marine waters and include coastal wetlands, such as tidal marshes. Lacustrine wetlands are associated with lakes, while riverine wetlands are found alongside rivers and streams. Palustrine wetlands may be isolated or connected wet areas and include marshes, swamps, and bogs.

Historically, wetlands were considered only as breeding grounds for mosquitoes and as impediments to development. As a result, an estimated 85-90% of California’s wetlands were converted to agricultural and urban uses, and water that flooded these wetlands was diverted for other purposes and needs. Wetlands are now known to provide many critical functions in the environment including protecting and improving water quality (sediment accretion, filtration, or nutrient uptake), flood control and groundwater recharge, erosion control, wildlife habitat, biological diversity, and outdoor recreation. Many wetlands provide vital habitats for wildlife and plants and are protected under various laws.

Certain DFG-managed wetlands (e.g., in the Central Valley of California) are classified as either seasonal, semi-permanent, or permanent, depending on the timing and duration of surface waters. Seasonally flooded wetlands can produce formidable numbers of mosquitoes, whereas semi-permanent and permanent wetlands usually produce far fewer mosquitoes because of their

1. When potential sources of mosquitoes are on DFG-managed property, the local mosquito and vector control agency should be consulted.
3. Vegetation must be managed routinely; activities such as annually thinning rushes and cattails and removing excess vegetative debris enables natural predators to hunt mosquito larvae more effectively in permanent wetlands. Vegetation in shallow, temporary wetlands can be mowed when dry.
4. Improving water flow through the wetland system minimizes stagnant water and facilitates movement of fish and other natural predators. For example, mosquitoes in coastal tidal wetlands can be managed by constructing and maintaining ditches that drain off the water when the tide falls.
5. The time when seasonal wetlands are flooded can be altered to reduce the overlap with peak mosquito activity.
6. The amount of fertilizer and/or manure flowing into wetlands should be minimized using proper irrigation drainage; fertilizers should be used conservatively. Buffers between agriculture fields and wetlands should be established.

SPECIFIC MOSQUITO REDUCTION BMPs

Information within this section has been partially adapted from Kwasny et. al. 2004. Based on the site activities and potential for mosquito production, the existing BMPs may need to be modified or supplemented to address public health risk, goals and management strategy issues, and requirements of DFG, the local mosquito and vector control agency, and CDPH.

WATER MANAGEMENT PRACTICES FOR SEASONAL WETLANDS

1. TIMING OF FLOODING

maintained outside of the mosquito breeding season.

- Flood wetlands with water from permanent water sources containing mosquito predators (i.e., mosquito-eating fish or invertebrate predators) to passively introduce mosquito predators. Permanent wetlands and brood ponds used as flooding sources can be stocked with mosquito-eating fish or maintained to encourage natural predator populations.
- Use a flood-drain-flood regime to control *Aedes* mosquitoes; flood to trigger hatching of dormant mosquito eggs, drain water and larvae into an area where they can be easily treated, drowned in moving water, or consumed by predators, and immediately reflood wetland. This water management regime should be used only when it does not conflict with water quality regulations.

4. FREQUENCY AND DURATION OF IRRIGATION*

- When possible, reduce the number and duration of irrigations to minimize standing water. The need to irrigate should be evaluated based on spring habitat conditions and plant growth. Extended duration irrigations (generally 14-21 days) may be considered for weed control (e.g., cocklebur). Additional measures to offset the potential for increased mosquito production may be needed.
- When possible, managed wetlands should be drawn-down in late March or early April and irrigated in late April or early May when the weather is cooler and mosquitoes are less of a problem.
- Irrigate managed wetlands before soil completely dries after spring draw-down to discourage floodwater mosquitoes from laying eggs in the dry, cracked substrate.
- Drain irrigation water into ditches or other water sources with mosquito predators instead of nearby dry fields.
- Maintain high ground water levels by keeping channels or deep swales permanently flooded for subsurface irrigation to reduce the amount of irrigation water needed during the growing season and thereby reduce the amount of standing water available for mosquito production (i.e., water hyacinth, water primrose, parrot's feather, duckweed, and filamentous algal mats).

WETLAND INFRASTRUCTURE MAINTENANCE

1. Inspect levees at least annually and repair as needed.
2. Periodically inspect, repair, and clean water control structures.
 - Remove all debris, including silt and vegetation, which can impede drainage and water flow.
 - Ensure water control structures are watertight to prevent unnecessary water flow or seepage.
3. Regularly remove trash, silt and vegetation from water delivery ditches to allow efficient water delivery and drainage.
 - Remove problem vegetation that inhibits water flow using herbicides or periodic dredging.
 - If possible, use closed conduits instead of open canals for water conveyance.
4. Periodically test and repair pumps used for wetland flooding to maximize pump output.

WETLAND RESTORATION AND ENHANCEMENT FEATURES

Design wetlands with features that minimize the potential for producing mosquitoes.

- Include, when possible, independent inlets and outlets in the design of each wetland unit.
- Provide adequate water control structures for complete draw-down and rapid flooding.
- Design swales with adequate slopes so the majority of the wetland can be drawn down.
- Install cross-levees where appropriate to improve the ability to rapidly flood and irrigate. "Underwater" levees that isolate irrigation water during the spring but can be overtopped during fall and winter flooding can also be built.

- Flood managed wetlands from permanent-water sources containing mosquito predators (e.g., mosquito-eating fish or invertebrate predators) to passively introduce mosquito predators. Permanent wetlands and brood ponds can be stocked with mosquitofish or native predatory species.
- Maintain permanent or semi-permanent waters where larval mosquito predators can develop and thrive. Discourage the use of broad spectrum pesticides.

PERSONAL PROTECTIVE MEASURES

- Provide visitors and guests with information regarding the risk of mosquito-borne disease transmission and personal protective measures.
- Install and maintain tight-fitting window and door screens on buildings.
- If possible, minimize outdoor activities at dawn and dusk when mosquitoes are the most active.
- Wear protective clothing such as long-sleeved shirts and long pants when going into mosquito-infested areas.
- Use mosquito repellent when necessary, carefully following the directions on the label.

RIGHT OF WAYS

The Division of Right-of-Way (RW) oversees right-of-way acquisitions required for transportation purposes and comprehensively manages the Caltrans Real Property Program, reducing the costs of operations and disposing of property no longer needed for transportation purposes. In addition, RW acquires, maintains, and leases suitable residential, non-residential, and airspace properties to public and private third parties. Airspace property is defined as “any property within operating State highway right-of-way limits that is capable of other development and can safely accommodate a secondary use without interference with the operation and foreseeable future expansion of the highway without endangering the traveling public.” Examples of such secondary uses include parking lots, self-storage units, commercial businesses, light industry, and cellular telephone towers. Many of these land-use types have the potential to produce significant mosquito populations if not properly designed and maintained.

STORMWATER INFRASTRUCTURE

The Caltrans Storm Water Program oversees the development of stormwater management infrastructure associated with roadways and facilities that provide both flood protection and non-point pollution mitigation as required by federal and state clean water laws. Rapid dewatering from roadways is prioritized to protect motorists. Typical components of stormwater infrastructure include drain inlets, catch basins, conveyance pipes, and structural treatment devices to remove suspended pollutants. Structural treatment devices are the most variable infrastructure components. Examples include vegetated swales, dry detention basins, ponds and constructed wetlands, media filtration devices, and trash capturing devices. Because of their function in runoff water management, structural treatment devices often provide habitats suitable for mosquito production.

and rain, particularly during warm weather. Water should not stand for more than 96 hours. Emergent vegetation and debris that can clog gutters and accumulate in the water should be minimized.

3. The design, construction, and maintenance of stormwater infrastructure must be considered carefully due its strong potential for producing mosquitoes. The two key components for minimizing mosquitoes in the majority of these systems are to fully discharge captured water in 96 hours or less and provide routine maintenance to maintain this function. Permanent sources including wetlands, ponds, sumps, and basins require control measures that minimize habitat suitable for mosquitoes and may require routine mosquito control with insecticides. Mosquito control agencies can help develop plans to minimize or eliminate mosquito production.
4. Mosquito and vector control agencies should be contacted to provide expert evaluation, consultation, and control.

SPECIFIC MOSQUITO REDUCTION BMPs

ELIMINATE ARTIFICIAL MOSQUITO BREEDING SITES

- Examine all outdoor grounds and drain unnecessary water that may stand longer than 96 hours.
- Dispose of unwanted or unused artificial containers.
- Properly dispose of old tires.
- If possible, drill drainage holes, cover, or invert any container or object that holds standing water that must remain outdoors. Be sure to check for containers or trash in places that may be hard to see, such as under bushes or under the facility.
- Clean clogged rain gutters and storm drains. Keep outdoor drains flowing freely and clear of leaves, vegetation, and other debris.
- Aerate ornamental ponds to avoid letting water stagnate.
- Change water in birdbaths, fountains, buckets, flower pots, and animal troughs at least once per week.
- Clean and chlorinate swimming pools. Keep unused pools empty and dry.

BIOLOGICAL CONTROL

- Ornamental ponds and other water features may be stocked with mosquitofish available from local mosquito control agencies. However, their use is restricted in natural bodies of water or in water features that drain into natural bodies of water. Land managers must consult with the local mosquito control agencies regarding proper use of mosquitofish or other available biological control agents.

PERSONAL PROTECTIVE MEASURES

- Provide visitors and guests with information regarding the risk of mosquito-borne disease transmission and personal protective measures.
- Install and maintain tight-fitting window and door screens on buildings.
- If possible, minimize outdoor activities at dawn and dusk when mosquitoes are the most active.
- Wear protective clothing such as long-sleeved shirts and long pants when going into mosquito-infested areas.
- Use mosquito repellent when necessary, carefully following the directions on the label.

STORMWATER INFRASTRUCTURE

Based on the site activities and potential for mosquito production, the existing BMPs may need to be modified or supplemented to address public health risk, water quality goals, stormwater management issues, and requirements of the local mosquito and vector control agency, Caltrans, and CDPH. Information within this section has been partially adapted from Metzger et al. 2003 and Metzger 2004.

3. Avoid the use of electric pumps. They are subject to failure and often require permanent-water sumps. Structures that do not require pumping should be favored over those that have this requirement.
4. Avoid the use of loose rock rip-rap that may hold standing water.
5. Design distribution pumping and containment basins with adequate slopes to drain fully. The design slope should take into consideration buildup of sediment between maintenance periods.

TREATMENT SYSTEMS WITH SUMPS OR BASINS

1. Where possible, completely seal belowground structures that retain water permanently or semi-permanently in sumps or basins (e.g., CDS™, Stormfilter™, Delaware-type sand media filters) to prevent entry of adult mosquitoes. If using covers or screens, maximum allowable gaps of 1/16th inch (2 mm) will exclude entry of adult mosquitoes. Inspect barriers frequently and replace when needed.
2. If the sump or basin is completely sealed against mosquitoes, with the exception of the inlet and outlet, the inlet and outlet should be completely submerged to reduce the available surface area of water for mosquitoes to lay eggs (female mosquitoes can fly through pipes).
3. Where possible, design belowground sumps with the equipment necessary to allow for easy dewatering of the unit.

PERMANENT TREATMENT PONDS AND CONSTRUCTED TREATMENT WETLANDS

1. Whenever possible, stock permanent ponds and constructed wetlands with mosquito-eating fish available from local mosquito control agencies.
2. Design and maintain accessible permanent pond shorelines to allow for periodic maintenance and/or control of emergent and pond-edge vegetation, and routine monitoring and control of mosquitoes. Emergent plant density should be routinely maintained so mosquito predators can move throughout the vegetated areas.

GENERAL ACCESS REQUIREMENTS FOR STORMWATER TREATMENT STRUCTURES

1. All structures should be easily and safely accessible, without the need for special requirements (e.g., Occupational Safety and Health Administration requirements for “confined space”). This will allow vector control personnel to effectively monitor and, if necessary, abate vectors.
2. If utilizing covers, the design should include spring-loaded or lightweight access hatches that can be easily opened.
3. Provide all-weather road access (with provisions for turning a full-size work vehicle) along at least one side of large aboveground structures that are less than 21 feet, or both sides if shore-to-shore distance is greater than 21 feet. Note: Mosquito larvicides are applied with hand held equipment at small sites and with backpack or truck mounted high-pressure sprayers at large sites. The effective swath width of most backpack or truck-mounted larvicide sprayers is approximately 18–21 feet on a windless day.
4. Build access roads as close to the shoreline as possible to allow for maintenance and vector control crews to periodically maintain, control and remove emergent vegetation and conduct routine mosquito monitoring and abatement. Remove vegetation and/or other obstacles between the access road and the structure that might obstruct the path of larvicides to the water.
5. Control vegetation (by removal, thinning, or mowing) periodically to prevent barriers to access.

native habitat; the remaining 6% has been converted for use as facilities (http://www.parks.ca.gov/?page_id=23509). State parks protect and preserve a diverse collection of culturally and environmentally sensitive structures and habitats, threatened plant and animal species, ancient Native American sites, historic structures, and artifacts. State park resources include underwater preserves, reserves, and parks; redwood, rhododendron, and wildlife reserves; state beaches, recreation areas, wilderness areas, and reservoirs (e.g., dunes, marshes, lakes, streams, rivers, deserts, forests, meadows, and grasslands); state historic parks, historic homes, Spanish era adobe buildings (e.g., museums, visitor centers, cultural reserves, and preserves); lighthouses, ghost towns, waterslides, conference centers, and off-highway vehicle parks.

More than 85 million people visited California State Parks during the 2005-06 fiscal year. Almost half of California's state parks are adjacent to urban or residential development. Mosquito surveillance and control measures must be considered to protect the large number of people that visit the lands or live nearby.

GENERAL MOSQUITO MANAGEMENT GUIDELINES

1. Basic information should be provided to district managers and supervisors on mosquitoes and on simple measures to minimize mosquito breeding habitats on state property. At a minimum, managers and supervisors should be provided with guidance on eliminating artificially created mosquito breeding sites around buildings and facilities, proper management of water features and stormwater infrastructure, taking personal protection measures, and contacting local and state agencies responsible for mosquito control. A variety of educational brochures are available from CDPH (See <http://westnile.ca.gov>). In addition, the local mosquito and vector control agency can provide technical guidance or assistance.

be hard to see, such as under bushes or under the facility.

- Clean clogged rain gutters and storm drains. Keep outdoor drains flowing freely and clear of leaves, vegetation, and other debris.
- Aerate ornamental ponds to avoid letting water stagnate.
- Change water in birdbaths, fountains, buckets, flower pots, and animal troughs at least once per week.
- Clean and chlorinate swimming pools. Keep unused pools empty and dry.
- Minimize sites mosquitoes can use for refuge by thinning branches, trimming and pruning ornamental shrubs and bushes, and keeping grass mowed short.

MANAGE SPRINKLERS AND IRRIGATION SYSTEMS

Overwatering, broken components, and poorly designed irrigation systems in landscaping, parks, and irrigated pastures and fields commonly create standing water that can produce mosquitoes.

- Avoid over-irrigating to prevent excess pooling and runoff.
- Back-fill low-lying areas that hold water for more than 96 hours.
- Improve drainage channels and grading to minimize potential for standing water.
- Design new irrigation systems to increase water efficiency.
- Keep drainage ditches free of excessive vegetation and debris to provide rapid drainage, but retain ground cover to prevent soil loss.
- Reduce seepage as much as possible by repairing ditches and drains.
- Check outdoor faucets and sprinklers and repair any leaks or broken components.
- Report any evidence of standing water to responsible maintenance personnel.

and wildlands cannot be modified. Collaboration with local vector control agencies is essential for limiting resource expenditure.

MONITORING AND SURVEILLANCE

- Conduct ongoing mosquito larvae surveillance and evaluation of larval populations on wildlands that produce mosquitoes capable of migrating into populated areas.
- Collect and monitor data from mosquito traps, complaints, and reports from the public.
- Correlate seasonal records with weather data to evaluate trends. Monitor larval and adult mosquito distribution.
- Accurately identify, map, and monitor areas that may produce mosquitoes. Tailor control measures for each site, contingent on the species of mosquitoes that are present.

BIOLOGICAL CONTROL

- Ornamental ponds and other water features may be stocked with mosquitofish available from local mosquito control agencies. However, their use is restricted in natural bodies of water or in water features that drain into natural bodies of water. Land managers must consult with the local mosquito control agencies regarding proper use of mosquitofish or other available biological control agents.
- Stabilize water levels to encourage colonization by natural predators of mosquito larvae.

PERSONAL PROTECTIVE MEASURES

- Provide visitors and guests with information regarding the risk of mosquito-borne disease transmission and personal protective measures.
- Install and maintain tight-fitting window and door screens on buildings.
- If possible, minimize outdoor activities at dawn and dusk when mosquitoes are the most active.

perceived that vital land resources were endangered by development or other threats.

These conservancies include:

- Baldwin Hills Conservancy
- California Tahoe Conservancy
- Coachella Valley Mountains Conservancy
- San Diego River Conservancy
- San Gabriel & Lower Los Angeles Rivers & Mountains Conservancy
- San Joaquin River Conservancy
- Santa Monica Mountains Conservancy
- Sierra Nevada Conservancy
- State Coastal Conservancy

MOUNTAINS - STATE PARKS

- Conduct ongoing mosquito larvae surveillance and evaluation of larval populations on conservancies that produce mosquitoes capable of migrating into populated areas.
- Collect and monitor data from mosquito traps, complaints, and reports from the public.
- Correlate seasonal records with weather data to evaluate trends. Monitor larval and adult mosquito distribution.
- Accurately identify, map, and monitor areas that may produce mosquitoes. Tailor control measures for each site, contingent on the species of mosquitoes that are present.

BIOLOGICAL CONTROL

- Ornamental ponds and other water features may be stocked with mosquitofish available from local mosquito control agencies. However, their use is restricted in natural bodies of water or in water features that drain into natural bodies of water. Land managers must consult with the local mosquito control agencies regarding proper use of mosquitofish or other available biological control agents.

PERSONAL PROTECTIVE MEASURES

- Provide visitors and guests with information regarding the risk of mosquito-borne disease transmission and personal protective measures.
- Install and maintain tight-fitting window and door screens on buildings.
- If possible, minimize outdoor activities at dawn and dusk when mosquitoes are the most active.
- Wear protective clothing such as long-sleeved shirts and long pants when going into mosquito-infested areas.
- Use mosquito repellent when necessary, carefully following the directions on the label.

- Boyce, K. W. and D. A. Brown. 2003. Integrated vector management guidelines for adult mosquitoes. *J. Am. Mosq. Control Assoc.* 19: 448-451.
- California Department of Public Health. 2008. Overview of Mosquito Control Practices in California. <http://www.westnile.ca.gov/resources.php>
- California Department of Public Health, Mosquito and Vector Control Association of California, and University of California. 2007. California Mosquito-Borne Virus Surveillance and Response Plan. <http://www.westnile.ca.gov/resources.php>
- California Department of Public Health. 2007. West Nile Virus Infection Prevention and Control Recommendations, California Long-term Care Facilities. <http://www.westnile.ca.gov/resources.php>
- California Department of Transportation. 2006 Right-of-Way Property Management and Airspace Storm Water Guidance Manual. <http://www.dot.ca.gov/hq/row/rwstormwater/index.htm>
- California Environmental Resources Evaluation System and the California Wetlands Information System. <http://ceres.ca.gov/wetlands/>
- Centers for Disease Control and Prevention. 2003. Epidemic/Epizootic West Nile Virus in the United States: Guidelines for Surveillance, Prevention, and Control. <http://www.cdc.gov/ncidod/dvbid/westnile/resources/wnvguidelines2003.pdf>
- Contra Costa Clean Water Program. 2004. Vector Control Plan. <http://www.cccleanwater.org/Publications/CCCWP%20Vector%20Control%20Plan%20Final.pdf>
- Darsie, RF Jr., and RA Ward. 2005. Identification and Geographical Distribution of the Mosquitoes of North America, North of Mexico. Univ. Press of Florida, Gainesville, 383pp.
- Eldridge BF. 1998. Mosquitoes: Integrated Pest Management Around the Home. Pest Notes. University of California. ANR Publication 7451

management: Vectors associated with BMPs. Proceedings of the California Mosquito and Vector Control Association. 70:2-10.

Metzger ME. 2004. Managing Mosquitoes in Stormwater Treatment Devices. University of California, ANR Publication: 8125.

Meyer RP, Reisen WK, Vector and Vector-borne Disease Committee. 2003. Integrated Mosquito Surveillance Guidelines. Sacramento, California: Mosq. Vector Control Assoc. Calif.

O'Malley CM. 1989. Guidelines for Larval Surveillance. Proceedings of the 76th New Jersey Mosquito Control Association Annual Meeting: 45-55.

Reeves WC, Asman SM, Hardy JL, Milby MM, and Reisen WK. 1990. Epidemiology and control of mosquito-borne arboviruses in California, 1943-1987. Sacramento, Calif: Calif. Mosq. Vector Control Assoc.

Reisen WK and Lothrop HD. 1999. Effects of sampling design on the estimation of adult mosquito abundance. J Am Mosq Control Assoc. 15:104-114.

Sacramento-Yolo Mosquito and Vector Control District. 2007. Mosquito Reduction Best Management Practices Implementation Program Policies. Elk Grove, CA: Sacramento-Yolo MVCD.

Sacramento-Yolo Mosquito and Vector Control District. 2005. Mosquito and Mosquito-Borne Disease Management Plan. Elk Grove, CA: Sacramento-Yolo MVCD.

Stockwell PJ, Wessell N, Reed DR, Kronenwetter-Koepel TA, Reed KD, Turchi TR, and Meece JK. 2006. A Field Evaluation of Four Larval Mosquito Control Methods in Urban Catch Basins. J Am Mosq Control Assoc. 22(4): 666-671.

United States Environmental Protection Agency. 2004. The Use of Best Management Practices (BMPs) in Urban Water Sheds. National Risk Management Research Laboratory.

Walton WE. 2003. Managing Mosquitoes in Surface-Flow Constructed Wetlands. University of California, ANR Publication: 8117.

CDC	Centers for Disease Control and Prevention
CDFA	California Department of Food and Agriculture
CDPH	California Department of Public Health
CSP	California State Parks
CVEC	Center for Vectorborne Diseases (UC Davis)
DFG	California Department of Fish and Game
DGS	California Department of General Services
DPR	California Department of Pesticide Regulation
EPA	Federal Environmental Protection Agency
H&S Codes	Health and Safety Codes
IPM	Integrated Pest Management
MVCAC	Mosquito and Vector Control Association of California
PCR	Polymerase Chain Reaction
SGVMVCD	San Gabriel Valley Mosquito and Vector Control District
SLE	St. Louis encephalitis virus
SYMVCD	Sacramento-Yolo Mosquito and Vector Control District
UCD	University of California, Davis
UCR	University of California, Riverside
VRDL	CDPH Viral and Rickettsial Disease Laboratory

Information on mosquito-borne diseases is available from the U.S. Centers for Disease Control and Prevention (CDC) and the CDPH websites. Contact information for local mosquito and vector control agencies can be found through the CDPH website by entering the zip code of the location of interest under "LOCATE YOUR LOCAL MOSQUITO AND VECTOR CONTROL AGENCY" at <http://westnile.ca.gov>; more information is available on the MVCAC website.

1. AMCA website: <http://www.mosquito.org>
2. MVCAC website: <http://www.mvacac.org>
3. CDPH West Nile virus website: <http://westnile.ca.gov>
4. CDC website: <http://www.cdc.gov>

MONITORING MOSQUITOES AND DISEASES

- More information about reporting dead birds and WNV surveillance in California can be found at <http://www.westnile.ca.gov>.
- Methods for sampling adult mosquitoes and guidelines for designing, operating, and processing of traps are discussed in Guidelines for Integrated Mosquito Surveillance (Meyer et al. 2003) and are summarized in Appendix B of the California Mosquito-Borne Virus Surveillance and Response Plan which can be found at: <http://westnile.ca.gov/resources.php>
- For federal WNV guidelines see the Centers for Disease Control and Prevention, Epidemic/Epizootic West Nile Virus in the United States: Guidelines for Surveillance, Prevention and Control <http://www.cdc.gov/ncidod/dvbid/westnile/resources/wnv-guidelines-aug-2003.pdf>
- For information specific for wildlife areas see Walton WE. 2005. Protocol for Mosquito Sampling for Mosquito Best Management Practices on State of California-Managed Wildlife Areas. University of California.

BEST MANAGEMENT PRACTICES

the number of people infected by West Nile virus; and

WHEREAS since 2002, West Nile virus has infected hundreds of people and caused multiple deaths in California, including four deaths this year; and

WHEREAS the recent upturn in foreclosures this year has increased the number of vacant homes this summer with unattended and untreated pools, which has exacerbated the spread of West Nile virus; and

WHEREAS local governments have made sustained efforts to minimize the spread of the virus, and the state has supplemented these efforts by dedicating over \$15 million over the last three years to mitigate the virus's effects; and

WHEREAS despite those efforts to eradicate West Nile virus, the virus remains a threat, and further efforts to control the spread of the virus and to reduce and minimize the risk of infection are needed; and

WHEREAS the Mosquito Vector Control Association of California, which is composed of 61 local vector control districts, is seeking state assistance in addressing the potential for a West Nile virus epidemic in California; including a request for funding for surveillance activity and abatement efforts; and

WHEREAS control of West Nile virus may require immediate actions to limit the population of adult mosquitoes and mosquito larvae, and those actions may include the ground and aerial application of pesticides in urban, suburban and rural areas; and

within Kern, Colusa and San Joaquin Counties, and hereby issue the following orders:

IT IS ORDERED that the Department of Public Health shall allocate up to \$1 million dollars as needed, to local vector control agencies to identify potential mosquito habitat and to treat those areas to prevent the spread of West Nile virus in the three above-listed counties and other counties identified by the Department of Public Health.

IT IS FURTHER ORDERED that the Department of Public Health shall allocate up to \$350,000 to local vector control agencies for surveillance purposes to provide an early warning of the incidence of West Nile Virus so that proper control measures can be taken by the local vector control agencies to prevent the spread of West Nile virus in the three above-listed counties and other counties identified by the Department of Public Health.

IT IS FURTHER ORDERED that the Department of Public Health shall coordinate with the State and Consumer Services Agency, the Resources Agency and the Department of Food and Agriculture to develop a plan using best management practices for implementation by the appropriate state agencies for the early detection of West Nile virus on state-owned properties and appropriate mitigation and abatement measures. Funds in the amount up to \$150,000 shall be allocated for the purpose of developing this plan.

IT IS FURTHER ORDERED that the Department of Public Health and the Department of Food and Agriculture shall work with the Mosquito Research Program at the University of California, Davis, to determine what resources are needed to further advance the research on the ecology and the epidemiology of West Nile virus.

all activities consistent with the direction of the Department of Public Health in an effort to address and mitigate this emergency, and consistent with the State Emergency Plan as coordinated by the Office of Emergency Services.

IT IS FURTHER ORDERED that the Department of Public Health enter into such contracts as it deems appropriate, in consultation with the above-listed counties and the mosquito and vector control agencies within those regions, to provide services, material, personnel and equipment to supplement the West Nile virus mitigation efforts in those jurisdictions.

IT IS FURTHER ORDERED that the provisions of the Government Code, the Public Contract Code, the State Contracting Manual and Management Memo 03-10, along with all Department of Public Health policies, applicable to state contracts, including, but not limited to, advertising and competitive bidding requirements and approvals for non-competitively bid contracts, are hereby temporarily suspended with respect to contracts to provide services, material, personnel and equipment to supplement the West Nile virus mitigation and abatement efforts in the above-listed counties to the extent that such laws would prevent, hinder or delay prompt mitigation of the effects of this emergency.

IT IS FURTHER ORDERED that the Department of Public Health shall consult with the county agricultural commissioner prior to the application of "prohibited materials," as defined in subdivision (p) of section 110815 of the Health and Safety Code, to agricultural land used for the production of certified organic foods.

IT IS FURTHER ORDERED that the Department of Public Health work with local public health departments to take appropriate actions to minimize the incidents of Valley Fever in the

	AC	OFFICE	U	U
CONSERVATION CORPS, CALIFORNIA	4	173.90	58	84,302
CONSERVATION, DEPT OF	2	0.26	1	2,000
CONSUMER AFFAIRS, DEPT OF	1	2.51	1	30,893
CONTROLLER, STATE	1	1.13	0	0
CORRECTION AND REHABILITATION	49	25,945.36	3,760	40,814,744
DEVELOPMENTAL SERVICES	6	2,415.62	539	5,186,281
DISTRICT AGRICULTURAL ASSOCIATIONS	45	3,200.31	1,312	7,689,616
EDUCATION	4	167.29	128	1,047,068
EMPLOYMENT DEVELOPMENT DEPARTMENT	27	42.52	27	527,860
EXPOSITION & STATE FAIR, CALIF	1	854.64	45	1,058,336
FISH AND GAME, DEPT OF	362	581,057.10	755	1,120,191
FOOD AND AGRICULTURE, DEPT OF	13	113.46	110	452,976
FORESTRY & FIRE PROTECTION, DEPT OF	269	74,969.74	2,221	3,879,733
GENERAL SERVICES, DEPT OF	79	1,954.12	128	18,083,988
HEALTH CARE SERVICES, DEPT OF	1	1.11	1	30,500
HEALTH PLANNING & DEVEL, OFC STATEWIDE	1	2.43	0	0
HIGHWAY PATROL, DEPT OF THE CALIF	108	624.94	173	1,109,804
JUDICIAL COUNCIL OF CALIFORNIA	4	5.40	0	0
JUSTICE, DEPT OF	6	10.51	7	150,857
LANDS COMMISSION, STATE	79	4,492,020.90	1	3,325
LEGISLATURE	1	1.55	1	237,000
LOTTERY COMMISSION, CALIFORNIA STATE	1	12.50	2	267,280
MENTAL HEALTH	5	2,692.22	436	6,350,728
MILITARY, DEPT OF	78	5,924.49	487	3,386,540
MOTOR VEHICLES, DEPT OF	96	241.75	97	1,846,285
PARKS & RECREATION, DEPT OF	276	1,236,074.10	5,316	6,349,874
PUBLIC HEALTH- CA DEPARTMENT OF	1	28.96	6	697,153
REHABILITATION, DEPT OF	1	3.20	4	42,278

CALIFORNIA STATE UNIVERSITY

The land holdings, in the broad sense, are used for educational programs. These include, but are not limited to, classroom buildings, faculty offices, student housing, athletic facilities, plant operations, libraries, performing arts, parking facilities, agricultural land and facilities, and natural habitat.

CALIFORNIA TAHOE CONSERVANCY

The land holdings, according to section 66907 of the California Public Resources Code, are for the protection of natural environment, provision of public access or public recreational facilities, and the preservation of wildlife habitat areas.

COACHELLA VALLEY MOUNTAINS CONSERVANCY

This conservancy's land holdings are discussed in California Public Resources Code section 33500 et seq. In sum, the Legislature finds that the Coachella Valley contains "unique and important open-space, wildlife, scenic, environmental, anthropological, cultural, scientific, educational and recreational resources" that should be protected.

COASTAL CONSERVANCY

This conservancy's land holdings are similar to those for the agency discussed above. This includes the protection and ecological improvements of environmentally sensitive lands, particularly wetlands and other wildlife habitats. The conservancy provides public access, and protection of scenic open-space and agricultural lands.

CONSERVATION CORPS

This state entity owns only one property (69.97 acres) consisting of approximately 20

DELTA PROTECTION COMMISSION

The commission has only one property, Staten Island in San Joaquin County.

DEVELOPMENTAL SERVICES

This department maintains five properties (buildings). These properties are developmental services centers located across the state.

EDUCATION

This department maintains six properties providing special educational services and housing for students in the special programs.

EMPLOYMENT DEVELOPMENT

This department manages property that is used to house staff that administer various programs.

FISH AND GAME

The Mission of the Department of Fish and Game is to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. The department has 629 properties totaling nearly 900 thousand acres. The main purposes are preserving wildlife habitats, wetlands, and other species habitats. The department is also responsible for the diversified use of fish and wildlife including recreational, commercial, scientific and educational uses.

FOOD AND AGRICULTURE

The land holdings are used for agricultural inspections stations, veterinary laboratories, and a laboratory and greenhouse complex.

The purpose of the commission's "School Lands", originally granted to California in 1853 to benefit public education, is to make the properties financially productive for retirees, beneficiaries, and disabled membership of the State Teacher's Retirement System (STRS). The purposes of the commission's "Sovereign Lands" are water dependent commerce, fishing, navigation, recreational activities, ecological preservation, and scientific research.

MENTAL HEALTH

This department's land holdings, which consist of five hospitals and two correctional programs, are used to provide long-term mental health care for those with serious mental illnesses.

MOTOR VEHICLES

This department's land holdings include buildings and facilities that provide services to motorists.

STATE PARKS

This department's land holdings are for the preservation of California's biological diversity, protection of the highly valued natural and cultural resources, and creation of high-quality outdoor recreation. Responsible for almost one-third of California's scenic coastline, California State Parks manages coastal wetlands, estuaries, beaches, and dune systems. State parks consist of nearly 1.4 million acres, with over 280 miles of coastline; 625 miles of lake and river frontage; nearly 15,000 campsites; and 3,000 miles of hiking, biking, and equestrian trails.

SANTA MONICA MOUNTAINS CONSERVANCY

The purpose of this conservancy's property is the formation of an interlinking system of urban, rural, and river parks, open space, trails, and wildlife habitats accessible to the general public.

The land holdings, in the broad sense, are used for educational programs. These include, but are not limited to, classroom buildings, faculty offices, student housing, athletic facilities, plant operations, libraries, performing arts, parking facilities, agricultural land and facilities, and natural habitat.

VETERAN'S AFFAIRS

The department, through the Farm and Home Loan Division, owns the Sacramento headquarters building and parking lot, the building and surrounding land at the Santa Clara district office, and approximately 33,000 homes held as collateral for contracts of purchase by veterans.

The Veteran's Home Division owns the land and various buildings that comprise the Veteran's Homes in Yountville, Barstow, and Chula Vista. In addition, Yountville Veteran's Home owns the land under and surrounding a reservoir and water treatment plant, a waste treatment plant, golf course (leased to a private firm) and a cemetery.

WATER RESOURCES CONTROL BOARD

This board owns one property in Alpine County (resulting from a resolved lawsuit).

WATER RESOURCES

The land holdings of The Division of Land and Right-of-Way are for the State Water Project and Flood Control (of the Reclamation Board).

owned properties and appropriate mitigation and abatement measures. In accordance with this plan, all state agencies are given key responsibilities regarding their managed properties as follows: 1) to coordinate with local vector control agencies to ensure that effective surveillance and abatement procedures are conducted, 2) to disseminate information regarding BMPs and mosquito control procedures, and 3) to disseminate information regarding the risks and prevention of WNV.

CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

- Collate adult mosquito abundance data submitted by local agencies; provide summary of data to local agencies.
- Provide contact information for local mosquito and vector control agencies by zip code. Available on website: www.westnile.ca.gov
- Maintain a WNV information and dead bird reporting hotline, 1-877-WNV-BIRD, and a WNV website: www.westnile.ca.gov
- Coordinate submission of specimens for virus testing.
- Provide supplies for processing mosquito pool and sentinel chicken diagnostic specimens.
- Test sentinel chicken sera for viral antibodies.
- Maintain data including registration of collection sites, entry of mosquito abundance and pool data, and sentinel chicken sera data through the California Vectorborne Disease Surveillance Gateway <http://gateway.calsurv.org>
- Test human specimens for virus.
- Distribute a weekly bulletin summarizing surveillance test results.
- Send weekly surveillance results to the University of California, Davis (UCD) interactive website.
- Provide statewide, daily DYCAST human risk maps, available through the California Vectorborne Disease Surveillance Gateway (<http://gateway.calsurv.org>).
- Provide analysis of DYCAST risk data and notification to local agencies when appropriate.
- Immediately notify local vector control agency and public health officials when evidence of viral activity is found.
- Conduct epidemiological investigations of human vector-borne disease cases.

- Provide confirmation of tests done by local or state agencies.

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE (CDFA)

- Notify veterinarians and veterinary diagnostic laboratories about WEE and WNV and testing facilities available at UCD CVEC.
- Provide outreach to general public and livestock and poultry producers on the monitoring and reporting of equine and ratite encephalitides.
- Facilitate equine and ratite sample submission from the field.
- Conduct epidemiological investigations of equine cases.

CALIFORNIA ANIMAL HEALTH AND FOOD SAFETY LABORATORY

- Identify dead birds for WNV testing.
- Conduct necropsies and testing on dead birds.
- Submit bird tissues to UCD for testing.
- Test equine specimens for WNV.

LOCAL MOSQUITO AND VECTOR CONTROL AGENCIES

- Gather, collate, and interpret regional climate and weather data.
- Monitor abundance of immature and adult mosquitoes.
- Collect and submit mosquito pools to CVEC for virus detection.
- Maintain sentinel chicken flocks, obtain blood samples, and send samples to CDPH for testing.
- Pick-up and ship dead birds for necropsy and WNV testing, or test oral swabs from American crows locally via rapid antigen screening assays.
- Update CDPH weekly of all birds that are independently reported and/or tested by VecTest, RAMP, or immunohistochemistry.
- Conduct routine control of immature mosquitoes.
- Conduct control of adult mosquitoes when needed.
- Educate public on mosquito avoidance and reduction of mosquito breeding sites.
- Coordinate with local Office of Emergency Services personnel.

among the worst biting pests. *Aedes* mosquitoes do not lay their eggs directly on the surface of standing water. Instead, they lay single eggs on intermittently flooded surfaces such as the damp soil around irrigated pastures and fields, along the edges of coastal tidal marshes, and inside dry treeholes and containers. Eggs are extremely resistant to drying and will lie dormant on dry surfaces until flooding occurs (eggs of *Ae. vexans* have been documented to lie dormant for up to three years). This can lead to many generations of eggs in a given habitat if female mosquitoes lay successive batches of eggs before the area is flooded. When flooding occurs, large numbers of eggs hatch spontaneously and develop rapidly to adults. Although larval developmental sites vary greatly, the most productive include transient ground pools, flooded areas along overflowing streams, flood and stormwater control basins, intermittently flooded agricultural lands, and container habitats such as tree holes, wheel ruts, and discarded tires.

Aedes are primarily summer-breeding mosquitoes. Because of their rapid larval development in newly-flooded habitats, adults often emerge before predators can colonize the water source. Most *Aedes* complete two to several generations per year depending on the frequency of habitat flooding from natural and artificial events. Adults cannot survive in colder weather and therefore the majority of *Aedes* overwinter as eggs.

Typically, *Aedes* mosquitoes found in California will not enter buildings and homes; however, they are strong fliers and are known to travel many miles from their aquatic developmental sites to search for hosts. *Aedes* mosquitoes are diurnal (i.e., active during the day) during mild weather, especially around shaded areas, but will also bite at dusk. Most *Aedes* females feed on large mammals like cattle and horses, but will readily feed on humans. *Aedes* mosquitoes are aggressive and persistent biters causing people and animals to avoid areas where their

breeding season. Eggs are not resistant to drying and typically hatch within two-three days, although hatching may take up to two-three weeks in colder climates. Larvae develop in 12 to 20 days, but can take longer in cooler weather. Preferred larval habitats include clear, fresh seepage water in sunlit or partly shaded pools, wetlands, roadside ditches, rice fields, and poorly maintained water troughs.

Adult females bite at dusk and dawn and prefer to feed on mammals. Many *Anopheles* mosquitoes prefer to feed on rabbits, but will also feed on large mammals such as livestock and humans. In California, *Anopheles* species may undergo two or more generations per year. Most species overwinter in protected areas as mated females, resuming activity the following spring. These are among the first mosquitoes to emerge and bite humans each year.

Historically, *Anopheles freeborni*, the western malaria mosquito, was a vector of malaria in California. Currently, with the disease eradicated from California and the United States, it is considered a nuisance mosquito. This species is widespread throughout California and females will lay their eggs in any standing fresh water, although it is most abundant in rice fields or other wetlands during late summer. While most adult mosquitoes stay within a few miles of their breeding source, they will migrate further when seeking hibernation sites in fall. This can lead to a large influx of mosquitoes from uncontrolled areas to residential areas during September and October.

CULISETA MOSQUITOES

Only eight species of *Culiseta* mosquitoes occur in the continental United States, of which four are found in California. Females lay clusters of floating eggs (rafts) on the surface of standing water. *Culiseta* mosquitoes are moderately aggressive biters, attacking in the evening hours or

contaminated streams, ponds and pools become productive larval habitats. *Culex* larvae are known for thriving in polluted sources of water with a high organic content.

Culex mosquitoes prefer to take blood meals at dusk or after dark and can be painful and persistent biters. *Culex* preferably feed on birds but also feed on mammals including humans and horses. They readily enter houses and buildings in search of a suitable host. Two or more generations of *Culex* can occur per year. Females that emerge in late summer will mate and overwinter until the following spring or mid-summer.

Several species of *Culex* can transmit viruses that can cause encephalitis (i.e., inflammation of the brain), including WNV, SLE, and WEE. These mosquitoes are efficient and effective vectors of these diseases among birds, humans, horses and many other wild and domestic animals.

CULEX TARSALIS

Culex tarsalis, the western encephalitis mosquito, is one of California's most important and efficient vectors of WNV, SLE, and WEE. This species is widespread in California. *Cx. tarsalis* prefer to lay their eggs on fresh or lightly polluted standing water such as rice fields, ditches, pastures, waste water ponds, and seasonal wetlands. Other more urban freshwater sources include ornamental ponds, storm drains, and flood control channels. Larvae usually develop into adults in approximately 8-14 days; warmer water can shorten the developmental period. *Cx. tarsalis* are active from spring through fall; however the population in the Central Valley peaks in June to July with a secondary, smaller peak in September coinciding with flooding of seasonal wetlands. *Cx. tarsalis* survive through the winter as adults in barns, culverts, caves, and similar dark, protected places.

In California, *Cx. pipiens* and *Cx. quinquefasciatus* typically do not disperse from where they emerged. Females feed at dusk or after dark, readily enter homes and prefer avian hosts but will also feed on large mammals including humans. *Cx. pipiens* and *Cx. quinquefasciatus* are vectors of WNV and SLE virus, and have also been implicated in transmitting canine heartworm.

MOSQUITO EGGS

<i>Aedes vexans</i>	<i>Aedes ventrovittus</i>	<i>Culiseta impatiens</i>	<i>Culiseta incidens</i>
<i>Culex apicalis</i>	<i>Culex tarsalis</i>	<i>Culiseta incidens</i>	<i>Culiseta inornata</i>
<i>Culex boharti</i>	<i>Culiseta incidens</i>	<i>Culiseta inornata</i>	
<i>Culex reevesi</i>	<i>Culiseta inornata</i>		
<i>Culex tarsalis</i>	<i>Psorophora columbiae</i>		
<i>Culex territans</i>	<i>Psorophora signipennis</i>		
<i>Culex thriampus</i>			
<i>Culiseta incidens</i>			
<i>Culiseta particeps</i>			
<i>Culiseta inornata</i>			

SMALL CONTAINER	FRESH WATER MARSH	ROCK POOLS	BACKWATER PONDONS	SNOW MELT
<i>Aedes sierrensis</i>	<i>Anopheles freeborni</i>	<i>Aedes sierrensis</i>	<i>Aedes sierrensis</i>	<i>Aedes cataphylla</i>
<i>Aedes albopictus</i>	<i>Anopheles occidentalis</i>	<i>Anopheles punctipennis</i>	<i>Culex tarsalis</i>	<i>Aedes clivis</i>
<i>Culex pipiens</i>	<i>Culex erythrothorax</i>	<i>Culex tarsalis</i>	<i>Culex pipiens</i>	<i>Aedes communis</i>
<i>Culiseta incidens</i>	<i>Culex tarsalis</i>	<i>Culiseta incidens</i>	<i>Culex stigmatosoma</i>	<i>Aedes fitchii</i>
			<i>Culiseta incidens</i>	<i>Aedes hexodontus</i>
			<i>Culiseta inornata</i>	<i>Aedes pullatus</i>
				<i>Aedes sticticus</i>
				<i>Aedes tahoensis</i>
				<i>Culiseta incidens</i>

WOODLAND POOLS	IRRIGATED PASTURES	PERMANENT POUNDS
<i>Aedes bicristatus</i>	<i>Aedes melanion</i>	<i>Aedes schizopinax</i>
<i>Aedes increpitus</i>	<i>Aedes nigromaculis</i>	<i>Culex erythrothorax</i>
<i>Aedes washinai</i>	<i>Aedes vexans</i>	<i>Culex reevesi</i>
<i>Anopheles punctipennis</i>	<i>Culex tarsalis</i>	<i>Culex tarsalis</i>

The components of this appendix have been adapted from the California Mosquito-Borne Virus Surveillance and Response Plan; California Department of Public Health, Mosquito and Vector Control Association of California, and University of California, please refer to the following website for more information: www.westnile.ca.gov.

Label rates and usage vary from year to year and geographically. Consult your County Agricultural Commissioner and the California Department of Fish and Game before application. Examples of products containing specific active ingredients are provided below, but this is not an inclusive list nor constitutes product endorsement. For more information on pesticides and mosquito control, please refer to the U.S. EPA website: www.epa.gov/pesticides/factsheets/sketceters.htm

LARVICIDES:

1. BACILLUS THURINGIENSIS ISRAELENISIS (Bti)

Product Examples: Aquabac 200G, VectoBac® 12AS, Teknar HP-D

Use: Approved for most permanent and temporary bodies of water.

Limitations: Only works on actively feeding stages. Does not persist well in the water column.

2. BACILLUS SPHAERICUS (Bs)

Product Example: VectoLex® CG

Use: Approved for most permanent and temporary bodies of water.

Limitations: Only works on actively feeding stages. Does not work well on all species. May persist and have residual activity in some sites.

3. INSECT GROWTH REGULATORS (IGRS)

a. (S)-Methoprene

Product Example: Altosid® Pellets

Use: Approved for most permanent and temporary bodies of water.

6. ORGANOPHOSPHATE COMPOUND (TEMEPHOS)

Product Example: Abate® 2-BG

Use: Non-potable water; marshes; polluted water sites

Limitations: Cannot be applied to crops for food, forage, or pasture. This material may not be effective on some *Culex tarsalis* populations in the Central Valley.

ADULTICIDES:

1. ORGANOPHOSPHATE COMPOUNDS

a. Malathion

Product Example: Fyfanon® ULV

Use: May be applied by air or ground equipment over urban areas, some crops including rice, wetlands.

Limitations: Paint damage to cars; toxic to fish, wildlife and bees; crop residue limitations restrict application before harvest.

b. Naled

Product Example: Dibrom® Concentrate, Trumpet® EC

Use: Air or ground application on fodder crops, swamps, floodwater, residential areas.

Limitations: Similar to malathion.

c. Chlorpyrifos

Product Example: Mosquitomaster 412

Use: Air or ground application in urban or recreational areas

Limitations: Not registered for use over agricultural commodities, or grazing lands and may be toxic to bees, fish, and some wildlife.

2. PYRETHRINS (natural pyrethrin products)

Product Examples: Pyrenone® 2-BG Crop Spray, Pyrenone® 25-5, Evergreen®

Use: Wetlands, floodwater, residential areas, some crops.

Limitations: Do not apply to drinking water, milking areas; may be toxic to bees, fish, and

			BIO SCIENCES			
<i>Bacillus sphaericus</i> , (Bs)	VectoLex WDG	73049-57	Valent BioSciences	Water dispersible granule	Larvae	Biorational
<i>Bacillus sphaericus</i> , (Bs)	VectoLex WSP	73049-20	Valent BioSciences	Water soluble packet	Larvae	Biorational
<i>Bacillus thuringiensis var. israelensis</i> (Bti)	VectoBac 12AS	73049-38	Valent BioSciences	Liquid	Larvae	Biorational
<i>Bacillus thuringiensis var. israelensis</i> (Bti)	VectoBac G	275-50 or 73049-10	Valent BioSciences	Granule	Larvae	Biorational
<i>Bacillus thuringiensis var. israelensis</i> (Bti)	VectoBac Tech. Powder	73049-13	Valent BioSciences	Technical powder	Larvae	Biorational
<i>Bacillus thuringiensis var. israelensis</i> (Bti)	Aquabac 200G	62637-3	Becker Microbial	Granule	Larvae	Biorational
<i>Bacillus thuringiensis var. israelensis</i> (Bti)	Bactimos Briquets	6218-47	Summit	Donut-style-briquets	Larvae	Biorational
<i>Bacillus thuringiensis var. israelensis</i> (Bti)	Teknar HP-D	73049-404	Valent BioSciences	Liquid	Larvae	Biorational
<i>Monomolecular film</i>	Agnique MMF	2302-14	Henkel Corp.	Liquid	Larvae and pupae	Surface film
<i>Petroleum oil</i>	GB 1111	8329-72	Clarke	Liquid	Larvae and pupae	Surface film
<i>Dimilin zuron</i>	Dimlin 25W	400-465	Uniroyal Chemical	Wettable powder	Larvae	IGR
<i>S-methoprene</i>	Altosid ALL	2724-446	Wellmark-Zoecon	Liquid Concentrate	Larvae	IGR
<i>S-methoprene</i>	Altosid Briquets	2724-375	Wellmark-Zoecon	Briquet	Larvae	IGR
<i>S-methoprene</i>	Altosid Pellets	2724-448	Wellmark-Zoecon	Pellet-type granules	Larvae	IGR

412						
<i>Malathion</i>	Fyfanon® ULV	4787-8	Cheminova	Liquid	Adults	OP
<i>Naled</i>	Dibrom® Concentrate	5481-480	AMVAC	Liquid	Adults	OP
<i>Naled</i>	Trumpet® EC	5481-481	AMVAC	Liquid	Adults	OP
<i>Cyfluthrin</i>	Tempo Ultra SC	432-1363	Bayer	Liquid	Adults	Pyrethroid
<i>Deltamethrin</i>	Suspend® SC	432-763	Aventis	Liquid	Adults	Pyrethroid
<i>Lambda-cyhalothrin</i>	Demand CS	100-1066	Syngenta	Liquid	Adults	Pyrethroid
<i>Permethrin</i>	Aqua-Reslin®	432-796	Aventis	Liquid	Adults	Pyrethroid
<i>Permethrin</i>	Biomist® 4+12 ULV	8329-34	Clarke	Liquid	Adults	Pyrethroid
<i>Permethrin</i>	Permanone® Ready-To-Use	432-1182	Aventis	Liquid	Adults	Pyrethroid
<i>Pyrethrins</i>	Pyranone® 25-5	432-1050	Aventis	Liquid	Adults	Pyrethroid
<i>Pyrethrins</i>	Pyrenone® Crop Spray	432-1033	Aventis	Liquid	Adults	Pyrethroid
<i>Pyrethrins</i>	Pyrocide® 7396	1021-1569	MGK	Liquid	Adults	Pyrethroid
<i>Resmethrin</i>	Scourge® Insecticide (4%)	432-716	Aventis	Liquid	Adults	Pyrethroid
<i>Resmethrin</i>	Scourge® Insecticide (18%)	432-667	Aventis	Liquid	Adults	Pyrethroid

GOVERNING LAWS AND REGULATIONS

Many federal and state laws govern the activities of vector control agencies, including the Clean Water Act (CWA), the Endangered Species Act (ESA), and the Federal Insecticide Fungicide and Rodenticide Act (FIFRA). Pesticide application by vector control agencies in California is regulated under FIFRA. FIFRA is administered through the U.S. Environmental Protection Agency, and regulates the registration, labeling, and sales of pesticides in the United States.

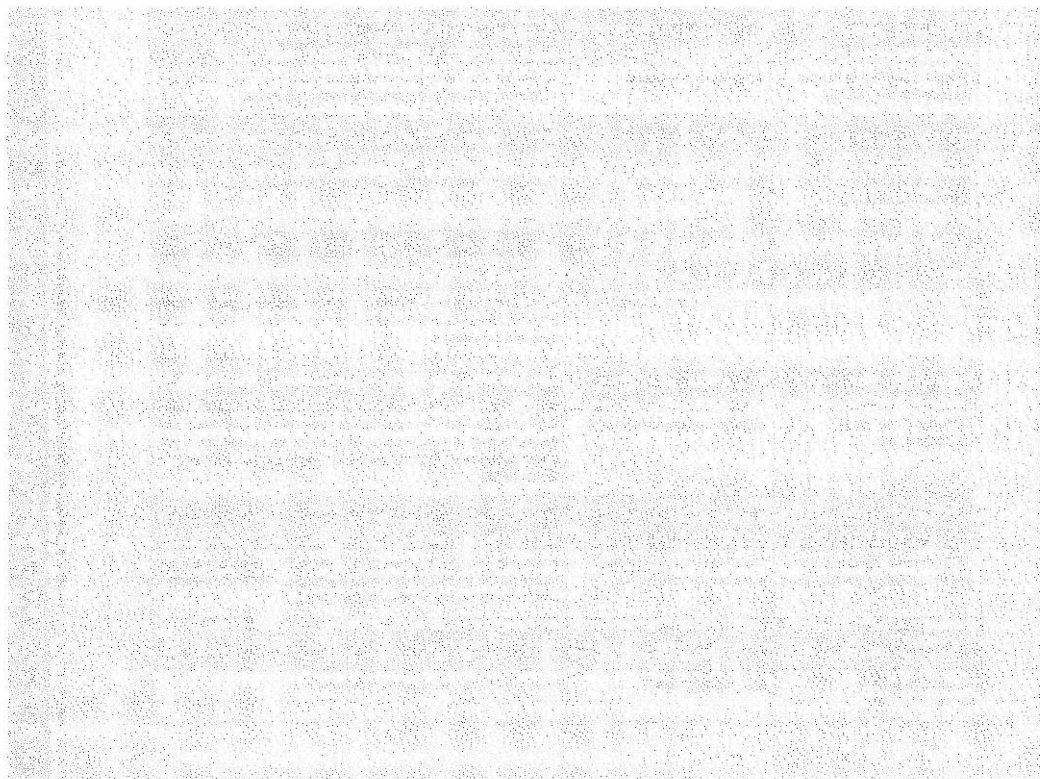
Under the H&S Code, local vector control agencies have the authority to conduct surveillance for vectors, prevent the occurrence of vectors, and legally abate production of vectors or public nuisance defined as “Any water that is a breeding place for vectors” and “Any activity that supports the development, attraction, or harborage of vectors, or that facilitates the introduction or spread of vectors.”(H&S Code Section 2002(j) and 2040). Vector control agencies also have authority to participate in review, comment, and make recommendations regarding local, state, or federal land use planning and environmental quality processes, documents, permits, licenses, and entitlements for projects and their potential effects with respect to vector production. (H&S Code Section 2041) Website link: <http://caselaw.lp.findlaw.com/cacodes/hsc/2040-2055.html>

Additionally, agencies have broad authority to influence landowners to reduce or “abate” the source of a vector problem. Actions may include imposing civil penalties of up to \$1000 per day plus costs associated with controlling the vector. Agencies have authority to “abate” vector sources on private and publicly owned properties. (H&S Code Sections 2060-2065). Website link: <http://caselaw.lp.findlaw.com/cacodes/hsc/2060-2067.html>

pesticides. Vector control technicians achieve certification through an examination process administered by the California Department of Public Health.

Vector control agencies cannot use any pesticide not registered for use in California, and are required to keep detailed records of each pesticide application, including date, location, and amount applied. All pesticides must be applied in accordance with the labeling of the product as registered with the U.S. EPA.

UC Davis Center for Vectorborne Diseases	http://cvec.ucdavis.edu/	Frequently updated reports and interactive maps on arbovirus surveillance and mosquito occurrence in California.
Mosquito and Vector Control Association of California	http://www.mvccac.org	News, membership information, event calendars, and other topics of interest to California's mosquito control agencies.
American Mosquito Control Association	http://www.mosquito.org/	News and other topics of interest to national mosquito control and mosquito-borne disease information.
California Vectorborne Disease Surveillance Gateway	http://surv.mvccac.org	Data management system for California's mosquito control agencies.
California Data Exchange Center	http://cdec.water.ca.gov	Water-related data from the California Department of Water Resources, including historical and current stream flow, snow pack and precipitation information.
UC IPM Online	http://www.ipm.ucdavis.edu	Precipitation and temperature data for stations throughout California; also allows calculation of degree-days based on user-defined data and parameters.
National Weather Service—Climate Prediction Center	http://www.cpc.ncep.noaa.gov/products/predictions/	Short-range (daily) to long-range (seasonal) temperature and precipitation forecasts. Also provides El Niño-related forecasts.
California Agricultural Statistics Service	http://www.nass.usda.gov/ca/	Crop acreage, yield, and production estimates for past years and the current year's projections. Reports for particular crops are published at specific times during the year—see the calendar on the website.
US Environmental Protection Agency—Mosquito Control	http://www.epa.gov/pesticides/health/mosquitoes/	Describes the role of mosquito control agencies and products used for mosquito control.
US Centers for Disease Control and Prevention—West Nile Virus	http://www.cdc.gov/ncidod/dvbid/westnile/index.htm	Information on the transmission of West Nile virus across the United States, viral ecology and background on WNV, and personal protection measures in various languages.
National Pesticide Telecommunications Network	http://npic.orst.edu/factsheets/DCETgen.pdf	Information regarding the use of DEET
National Pesticide Information Center	http://npic.orst.edu/	More information about using repellents



Response to Comment Letter 7: Orange County Mosquito and Vector Control District – 2/6/15

Comment 7-1 Response

Comment: The commenter states that in 2014 Orange County experienced the worst West Nile virus season to date, and would like to emphasize the importance of proper project planning in preventing the spread of vector-borne diseases. The commenter recommends any project elements which create standing water above ground or in below ground infrastructure should not hold water for more than 96 hours to avoid mosquito breeding conditions. The commenter also suggests ensuring all proposed freeway improvement projects, funded restoration projects and other elements of the OCTA NCCP/HCP Draft EIR/EIS minimize or avoid mosquito and vector production and harborage as described in the attached OCMVCD Vector Reduction Manual. The commenter also provides links to other resources for consideration.

Response: Thank you for your comments. The participation of Orange County Mosquito and Vector Control District in the public review of this document is appreciated. OCTA recognizes that mosquito and vector control is an issue that needs to be reviewed and addressed for each OCTA acquired Preserve. Chapter 7, 'Management and Monitoring' of the Plan has been updated to include the following statement as part of the guidelines for Preserve management:

Vector Control

- Coordinate with the Orange County Mosquito and Vector Control District and Wildlife Agencies to address management of areas within the Preserves that may have the potential to support mosquito and vector production and harborage.

OCTA has been coordinating with the Orange County Mosquito and Vector Control District during the interim management of the Preserves and will continue to coordinate with Preserve Managers to review conditions on the OCTA acquired Preserves to identify situations where areas of open standing water or below ground infrastructure that would hold water for more than 96 hours. If specific measures are warranted to minimize and avoid vector production on the Preserves, these measures will be identified and included the individual RMPs for each Preserve. Preserve Managers would be responsible for implementation.

OCTA will address vector control issues associated with covered freeway improvement projects during project specific environmental review. Restoration entities implementing restoration project funded by OCTA are responsible to conducting environmental review for their individual projects and must address vector control issues as part of their individual project environmental review and permitting. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 8: Santa Ana Regional Water Quality Control Board – 2/12/15

Angel Lin

From: Robertson, Glenn@Waterboards <Glenn.Robertson@waterboards.ca.gov>
Sent: Friday, February 13, 2015 11:37 AM
To: OCTA NCCP_HCP_Comments
Subject: FW: Note on Orange County Transportation Authority M2 NCCP-HCP Draft EIR

Dan, this did not transmit the first time...

Glenn S. Robertson
 Engineering Geologist, M.S., PG
 Regional Planning Programs Section, CEQA Coordinator
 Santa Ana Regional Water Quality Control Board
 3737 Main Street, Suite 500
 Riverside, CA 92501
 Phone: 951-782-3259
 Fax: 951-781-6288
 Email: Glenn.Robertson@waterboards.ca.gov

From: Robertson, Glenn@Waterboards
Sent: Thursday, February 12, 2015 5:33 PM
To: 'OCTA NCCP HCP'
Cc: Brown, Marc@Waterboards
Subject: Note on Orange County Transportation Authority M2 NCCP-HCP Draft EIR

To Dan Phu, Section Manager:

The comment period is closed but this may be considered more of a note on the Project from the Regional Water Quality Control Board, Santa Ana Region. We concur with the Draft EIR discussion for the Project and its establishment of mitigation sites for freeway projects.

8-1 Board staff note that those acreages of waters of the U.S. and state referred to in Section 4.4., Biological Resources, including Impact BIO-17 and Table 4.4-7(p.4.4-36), should be accounted for in a listing in a Report of Waste Discharge (ROWD) per Region, when those acreages are finalized, preserved, and any restoration implemented as freeway projects come online. This accounting, at least for Region 8, may be done together for all Region 8 sites prior to construction (Table 4.4-7 footnotes), and conducted through an application for a Clean Water Act Section 401 Water Quality Certification (list waters of the state in it along with federal) if a CWA Section 404 Permit is required by the U.S. Army Corps of Engineers. We are aware that OCTA would consider the preserved sites to be generally self-mitigating, and we are simply stating that an application (aside from CEQA) should be received by our office and on record. Then, any appropriate permitting action will be determined at that time.

Thank you for your consideration of the above.

Glenn S. Robertson
Engineering Geologist, M.S., PG
Regional Planning Programs Section, CEQA Coordinator
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501
Phone: 951-782-3259
Fax: 951-781-6288
Email: Glenn.Robertson@waterboards.ca.gov



Small, faint text or stamp located in the lower right quadrant of the page.



Response to Comment Letter 8: Santa Ana Regional Water Quality Control Board, Santa Ana Region – 2/12/15

Comment 8-1 Response

Comment: The commenter states that the Regional Water Quality Control Board concurs with the Draft EIR/EIS for the OCTA M2 NCCP/HCP. The commenter also states that acreages of the waters of the U.S. and state included in Section 4.4 of the EIR/EIS will need to be accounted for and addressed as part of future permitting for aquatic resources with the U.S. Army Corps of Engineers and State Water Resource Control Board.

Response: Thank you for your comment. These comments have been noted for the record. OCTA has coordinated with the United States Army Corps of Engineers (USACE) and the State Water Resources Control Board (SWRCB) to develop alternative permitting procedures to address anticipated discharges of dredged and fill materials into waters of the U.S. and waters of the State associated with constructing OCTA's M2 Freeway Projects. Specifically, new Letter of Permission (LOP) procedures (SPL -2012-00830-VCL) for the OCTA M2 Freeway Projects are proposed to more efficiently evaluate and, if determined eligible by the USACE in coordination with other federal and state agencies, authorize program activities that would discharge dredged or fill material into waters of the United States (U.S.), as regulated under section 404 of the Clean Water Act (CWA) (see response to Comment 6-4 for more details). Section 4.4 of the EIR/EIS has been updated to reflect to be consistent with the information included in the permit applications with the USACOE and SWRCB. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

9.2.2 Organizations Comments

Comment Letter 9: Puente Hills Habitat Preservation Authority– 1/28/15A

From: [Lizette Longacre](#)
To: [OCTA NCCP_HCP_Comments](#)
Subject: RE: response to comments
Date: Wednesday, January 28, 2015 11:32:59 AM

9-1 | Thank you for the quick reply.

Lizette Longacre
Ecologist
Puente Hills Habitat Preservation Authority
7702 Washington Ave., Suite C
Whittier, CA 90602
Office: (562) 945-9003
Cell: (562) 201-2062
Email: llongacre@habitatauthority.org

-----Original Message-----

From: OCTA NCCP_HCP_Comments [mailto:OCTA_NCCP_HCP_Comments@octa.net]
Sent: Wednesday, January 28, 2015 11:23 AM
To: Lizette Longacre
Subject: RE: response to comments

Good Morning,
We are anticipating the final NCCP/HCP along with the EIR/EIS will be finalized towards the end of 2015. The responses to comments received on the draft EIR/EIS will be included in the final environmental documents when they are released. The public will be notified when the final documents are released.

Thank you,

Marissa Espino
Strategic Communications Officer
Orange County Transportation Authority
714-560-5607
mespino@octa.net

-----Original Message-----

From: Lizette Longacre [<mailto:llongacre@habitatauthority.org>]
Sent: Wednesday, January 28, 2015 8:48 AM
To: OCTA NCCP_HCP_Comments
Subject: response to comments

Hello. We will be commenting on the DEIR/EIS but am wondering what your timeline is for certifying the FEIR/EIS? When will you release the Response to Comments?

Thanks.

Lizette Longacre
Ecologist
Puente Hills Habitat Preservation Authority
7702 Washington Ave., Suite C
Whittier, CA 90602
Office: (562) 945-9003
Cell: (562) 201-2062
Email: llongacre@habitatauthority.org

Response to Comment Letter 9: Puente Hills Habitat Preservation Authority – 1/28/15A

Comment 9-1 Response

Comment: The commenter confirms OCTA's previous email response to an inquiry on the Final EIR's certification timeline.

Response: No further response to this comment is required, and no changes to the Plan or Final EIR/EIS are warranted.

Comment Letter 10: Puente Hills Habitat Preservation Authority– 1/28/15B

**Puente Hills
Habitat Preservation Authority**
Endowment Provided by the Puente Hills Landfill

RECEIVED
FEB 02 2015
PLANNING DIVISION

January 28, 2015

Dan Phu, Section Manager
Orange County Transportation Authority
Attn: M2 NCCP/HCP
550 South Main Street
P.O. Box 14184
Orange, CA 92863-1584

Re: Draft Environmental Impact Report/Statement (DEIR/EIS) for the Orange County Transportation Authority's (OCTA) Measure 2 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP or Plan)

Dear Mr. Phu:

10-1 The Puente Hills Habitat Preservation Authority (Habitat Authority) is a joint powers authority established pursuant to California Government Code Section 6500 *et seq.* with a Board of Directors consisting of the City of Whittier, County of Los Angeles, Sanitation Districts of Los Angeles County, and the Hacienda Heights Improvement Association. According to its mission, the Habitat Authority is dedicated to the acquisition, restoration, and management of open space in the Puente Hills for preservation of the land in perpetuity, with the primary purpose to protect the biological diversity. Additionally, the agency endeavors to provide opportunities for outdoor education and low-impact recreation. The Habitat Authority owns and or manages over 3,800 acres which lie within the Cities of Whittier and La Habra Heights, as well as in the County unincorporated areas of the Puente Hills known as Hacienda Heights and Rowland Heights. The Puente Hills Preserve is an integral part of the Puente-Chino Hills Wildlife Corridor, an unbroken zone of natural habitat extending nearly 31 miles from the Cleveland National Forest in Orange County to the west end of the Puente Hills and Whittier Narrows.

Previously the Habitat Authority has commented on the Notice of Preparation (NOP) for the Orange County Transportation Authority Natural Community Conservation Plan /Habitat Conservation Plan (NCCP/HCP)/Master Streambed Alteration Agreement, and proposed planning agreement (see two attached letters). The Habitat Authority appreciates the opportunity to comment on the Draft Environmental Impact Report/Statement (DEIR/EIS) for the Orange County Transportation Authority's (OCTA) Measure M2 NCCP/HCP. This NCCP/HCP is mitigation for proposed M2 freeway improvement projects. The Habitat Authority strongly endorses the NCCP process as a habitat-based, regional approach to land conservation that transcends jurisdictional

A Joint Powers Agency created pursuant to California Government Code §6500 *et seq.*
7702 Washington Avenue, Suite C, Whittier, California 90602 • Phone: 562 / 945-9003 • Fax: 562 / 945-0303



10-1
cont.

boundaries. As a primary land owner and manager within the Puente-Chino Hills Wildlife Corridor, the Habitat Authority understands the need to conserve and manage lands for the benefit of multiple species and entire ecosystems, despite the challenges posed by complex ownership and jurisdictional issues.

Comments from the Habitat Authority on the DEIR/EIS are provided in the attached Exhibit A and include acquisition of preserves, design of recreation facilities, and passive restoration fencing, to name a few. Please see Exhibit A for a complete set of comments.

Thank you for your consideration, and please include me on the mailing list associated with the proceedings for this project. Please do not hesitate to contact Lizette Longacre, Ecologist, for discussion at (562) 945-9003 or llongacre@habitatauthority.org.

Sincerely,



Bob Henderson
Chairman

Att.

cc: Board of Directors
Citizens Technical Advisory Committee

EXHIBIT A - Habitat Authority Comments DEIR/EIS OCTA Measure M2 NCCP/HCP
January 28, 2015
Page 1

Recreation

10-2 *Discuss visitor carrying capacity during development of the Resource Management Plans. Please keep in mind that while activities such as hiking, wildlife observation, equestrian use, and non-motorized bicycling can be low-intensity recreational activities, impacts to the environment can be substantial depending on the numbers and behaviors of those recreationists. Perhaps a discussion of visitor carrying capacity during the development of the Resource Management Plans is warranted in areas with listed species or in sensitive habitats.*

Placement of trails, facilities, parking lots, etc.

10-3 *Design preserves in such a way so as to prevent further narrowing of wildlife corridors. Since Alternative 2, the Proposed Plan, proposes avoidance, minimization or compensation coverage for bobcats and mountain lions, the Habitat Authority recommends referring to existing studies on wildlife movement of medium to large size carnivores between open space habitats on existing and acquired preserves (e.g. Hafen, Saddle Creek South, O'Neill Oaks, Ferber Ranch), and conducting additional studies in areas where information is lacking. Since lands were, and continue to be, purchased to improve habitat connectivity and wildlife movement, knowledge of carnivore movement could assist in the proper placement of structures to prevent the unintentional narrowing of movement corridors with facilities and trails, especially near the Hayashi Preserve in the Puente-Chino Hills Wildlife Corridor where narrowing is of extreme concern. Detections of bobcats have been noted on the Hayashi and O'Neill Oaks preserves and detections of mountain lions have been noted on the O'Neill and Ferber preserves per the M2 Natural Community Conservation Plan/Habitat Conservation Plan EIR/EIS.*

Acquisition of Additional Preserves

10-4 *Consider acquisition and conservation of the Shell-Aera Property. Many of the impacts due to the freeway projects are occurring on the 91 and 57 freeways in the northern portion of Orange County impacting the Puente-Chino Hills Wildlife corridor. While we appreciate efforts to complete land acquisitions in the central subregion of the Orange County Central-Coastal NCCP/HCP and the Orange County Southern Subregion, mitigation in close proximity to impacts is always preferred. Lands owned or managed by the Habitat Authority are located in close proximity to the northwestern Orange County line near Brea, and the continued acquisition and management of lands within the Puente-Chino Hills in Los Angeles County would provide further connectivity between this area and Orange County extending to the Santa Ana Mountains, helping to meet the Preliminary Conservation Objectives of the NCCP by "providing for habitat connectivity to ensure reserves maintain their biological functions and values." The *Conservation Assessment of Orange County*, prepared for this NCCP process by the Conservation Biology Institute (CBI) in December 2009, identified 39 Priority Conservation Areas (PCAs) which should be the focus for initial conservation efforts and land acquisition due to their contribution to the regional reserve system. One of the three PCAs identified in the Chino Hills Core Habitat Area (PCA A) is located immediately adjacent to the Los Angeles County line, and is contiguous with a much larger undeveloped parcel, the Shell-Aera property. Although much of this property is located within Los Angeles County, its size and*

EXHIBIT A - Habitat Authority Comments DEIR/EIS OCTA Measure M2 NCCP/HCP
 January 28, 2015
 Page 2

- 10-4
cont.

location within a key portion of the Puente-Chino Hills Wildlife Corridor makes its conservation critical to maintaining wildlife movement and biological diversity in both the Puente Hills and Chino Hills located largely in Los Angeles and Orange Counties.

The Shell-Aera property was part of Group 1 (Property Number 75) of the Acquisition Properties Evaluation conducted by the Measure M2 Freeway Mitigation Program Oversight Committee in February 2010. Group 1 properties are defined as those having the following attributes: high quality habitat, heterogeneous habitat, larger sized properties, aligns with impacted habitats, and contains covered species¹. The Shell-Aera property was also recommended for proceeding with appraisal process and/or for acquisition consideration. As such, the Habitat Authority recommends future reconsideration of the Shell-Aera property for acquisition and conservation, as it was determined as high priority for conservation. This acquisition would help conserve proposed NCCP/HCP/MSAA target species, and it would help maintain the Puente-Chino Hills Wildlife Corridor including Chino Hills State Park and all conserved habitat within the Puente Hills Preserve west of the Shell-Aera property, most of which is owned and/or managed by the Habitat Authority. Perhaps through cross-county collaboration for advance mitigation, other funding sources might be available to acquire such properties.
- 10-5

Riparian passive restoration fencing – Hayashi Preserve
Ensure that passive fencing to exclude cattle will not impede bobcat, mountain lion, or other significant wildlife species', movement. As a conservation action to expand least Bell's vireo habitat (per Species Goal 10), fencing has been installed by OCTA to exclude cattle from grazing in the riparian corridor on the Hayashi Preserve. However, the Hayashi Preserve is also important for large mammal movement and bobcats have been detected on the property (per the M2 Natural Community Conservation Plan/Habitat Conservation Plan EIR/EIS). While both goals can be met simultaneously with careful planning and fence design, please confirm that the cattle exclusion fencing used will not impede bobcat and mountain lion movement.
- 10-6

Finally, the Habitat Authority also encourages the inclusion of any mitigation measures in the EIR for the NCCP/HCCP that would promote wildlife movement and habitat connectivity within the larger Puente-Chino Hills Wildlife Corridor, such as maintenance or construction of wildlife underpasses or overpasses and methods to reduce edge effects (such as noise, light, domestic animals) to wildlife from adjacent development.

¹ Acquisition Properties Evaluation (PCA and Non-PCA - Biological Criteria). February 24, 2010. Downloaded from <http://www.octa.net/pdf/eoc44.pdf>



Puente Hills Landfill
Native Habitat Preservation Authority

December 16, 2010

Dan Phu
Section Manager
Orange County Transportation Authority
Attn: M₂ NCCP/HCP/MSAA
550 South Main Street
P.O. Box 14184
Orange, CA 92863-1584

Re: Notice of Preparation (NOP) and for the Orange County Transportation Authority
Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP)/Master
Streambed Alteration Agreement (MSAA)

Dear Mr. Phu:

The Puente Hills Landfill Native Habitat Preservation Authority (Habitat Authority) is a joint powers authority established pursuant to California Government Code Section 6500 *et seq.* with a Board of Directors consisting of the City of Whittier, County of Los Angeles, Sanitation Districts of Los Angeles County, and the Hacienda Heights Improvement Association. According to our mission, the Habitat Authority is dedicated to the acquisition, restoration, and management of open space in the Puente Hills for preservation of the land in perpetuity, with the primary purpose to protect the biological diversity. The Habitat Authority's jurisdiction extends within eastern Los Angeles County.

The Habitat Authority appreciates the opportunity to comment on the Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the Orange County Transportation Authority Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP)/Master Streambed Alteration Agreement (MSAA). The Habitat Authority strongly endorses the NCCP process as a habitat-based, regional approach to land conservation that transcends jurisdictional boundaries. As a primary land owner and manager within the Puente-Chino Hills Wildlife Corridor, the Habitat Authority understands the need to conserve and manage lands for the benefit of multiple species and entire ecosystems, despite the challenges posed by complex ownership and jurisdictional issues.

The Habitat Authority provided comments on the proposed Planning Agreement for the NCCP/HCP in a letter to the California Department of Fish and Game dated April 23,

A Joint Powers Agency created pursuant to California Government Code §6500 *et seq.*
7702 Washington Avenue, Suite C, Whittier, California 90602 • Phone: 562 / 945 - 9003 • Fax: 562 / 945 - 0303



Printed on recycled paper

2009. In this letter, we stated that we were encouraged by the language in the proposed agreement which stated that “regardless of the scope of the Planning Area [Orange County], nothing in this Planning Agreement shall be construed to limit the consideration of adjacent areas outside of the County that are appropriate to take into account for preserve design purposes.” Lands owned or managed by the Habitat Authority are located in close proximity to the northwestern Orange County line near Brea, and the continued acquisition and management of lands within the Puente-Chino Hills in Los Angeles County would further connectivity between this area and Orange County extending to the Santa Ana Mountains, helping to meet the Preliminary Conservation Objectives of the NCCP by “providing for habitat connectivity to ensure reserves maintain their biological functions and values.”

The *Conservation Assessment of Orange County*, prepared for this NCCP process by the Conservation Biology Institute (CBI) in December 2009, identified 39 Priority Conservation Areas (PCAs) which should be the focus for initial conservation efforts and land acquisition due to their contribution to the regional reserve system. One of the three PCAs identified in the Chino Hills Core Habitat Area (PCA A) is located immediately adjacent to the Los Angeles County line, and is contiguous with a much larger undeveloped parcel, the Shell-Aera property. Although much of this property is located within Los Angeles County, its size and location within a key portion of the Puente-Chino Hills Wildlife Corridor makes its conservation critical to maintaining wildlife movement and biological diversity in both the Puente Hills and Chino Hills located largely in Los Angeles and Orange Counties.

The Shell-Aera property was part of Group 1 (Property Number 75) of the Acquisition Properties Evaluation conducted by the Measure M2 Freeway Mitigation Program Oversight Committee in February 2010. Group 1 properties are defined as those having the following attributes: high quality habitat, heterogeneous habitat, larger sized properties, aligns with impacted habitats, and contains covered species¹. The Shell-Aera property was also recommended for proceeding with appraisal process and/or for acquisition consideration. As such, the Habitat Authority recommends future reconsideration the Shell-Aera property for acquisition and conservation, as it was determined as high priority for conservation, it would help conserve proposed NCCP/HCP/MSAA target species, and it would help maintain the Puente-Chino Hills Wildlife Corridor including Chino Hills State Park and all conserved habitat within the Puente Hills Preserve west of the Shell-Aera property, most of which is owned and/or managed by the Habitat Authority.

Finally, the Habitat Authority also encourages the inclusion of any mitigation measures in the EIR for the NCCP/HCP/MSAA that would promote wildlife movement and habitat connectivity within the larger Puente-Chino Hills Wildlife Corridor, such as maintenance or construction of wildlife underpasses or overpasses, restoration of natural movement pathways such as riparian corridors, restoration of native habitats that connect separated

¹ Acquisition Properties Evaluation (PCA and Non-PCA - Biological Criteria). February 24, 2010. Downloaded from <http://www.octa.net/pdf/eoc44.pdf>

areas of existing native habitat, and methods to reduce edge effects (such as noise, light, domestic animals) to wildlife from adjacent development.

The Habitat Authority is available to provide any information or data necessary during preparation of the NCCP/HCP/MSAA and EIR. Please do not hesitate to contact me or Andrea Gullo, Executive Director for discussion at (562) 945-9003.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bob Henderson", with a long horizontal flourish extending to the right.

Bob Henderson
Chairman

C: Board of Directors and Advisory Committee



Puente Hills Landfill
Native Habitat Preservation Authority

April 23, 2009

Erinn Wilson
California Department of Fish and Game
South Coast Region
4949 Viewridge Avenue
San Diego, California 92123

Re: Proposed Planning Agreement for the Orange County Transportation Authority
Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP)

Dear Ms. Wilson:

The Puente Hills Landfill Native Habitat Preservation Authority (Habitat Authority) is a joint powers authority established pursuant to California Government Code Section 6500 *et seq.* with a Board of Directors consisting of the City of Whittier, County of Los Angeles, Sanitation Districts of Los Angeles County, and the Hacienda Heights Improvement Association. According to our mission, the Habitat Authority is dedicated to the acquisition, restoration, and management of open space in the Puente Hills for preservation of the land in perpetuity, with the primary purpose to protect the biological diversity. The Habitat Authority's jurisdiction extends within eastern Los Angeles County.

The Habitat Authority appreciates the opportunity to comment on the proposed planning agreement for the Orange County Transportation Authority Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP). The Habitat Authority strongly endorses the NCCP process as a habitat-based, regional approach to land conservation that transcends jurisdictional boundaries. As a primary land owner and manager within the Puente-Chino Hills wildlife corridor, the Habitat Authority understands the need to conserve and manage lands for the benefit of multiple species and entire ecosystems, despite the challenges posed by complex ownership and jurisdictional issues.

The Habitat Authority is encouraged by the language in the proposed agreement which states that "regardless of the scope of the Planning Area [Orange County], nothing in this Planning Agreement shall be construed to limit the consideration of adjacent areas outside of the County that are appropriate to take into account for preserve design purposes." Lands owned or managed by the Habitat Authority are located in close

A Joint Powers Agency created pursuant to California Government Code §6500 *et seq.*
7702 Washington Avenue, Suite C, Whittier, California 90602 • Phone: 562 / 945 - 9003 • Fax: 562 / 945 - 0303



Printed on recycled paper

OCTA HCP
Habitat Authority
Page 2

proximity to the northwestern Orange County line near Brea, and the continued acquisition and management of lands within the Puente-Chino Hills in Los Angeles County would further connectivity between this area and Orange County extending to the Santa Ana Mountains, helping to meet the Preliminary Conservation Objectives of the NCCP by “providing for habitat connectivity to ensure reserves maintain their biological functions and values.”

The Habitat Authority is available to provide any information or data necessary during preparation of the NCCP. Please do not hesitate to contact me or Shannon Lucas, Ecologist, for discussion at (562) 945-9003 or slucas@habitatauthority.org.

Sincerely,



Bob Henderson
Chairman

C: Board of Directors and Advisory Committee

Response to Comment Letter 10: Puente Hills Habitat Preservation Authority – 1/28/15B

Comment 10-1 Response

Comment: The commenter provides an introduction for the Puente Hills Habitat Preservation Authority (Habitat Authority) and its mission. The commenter states that the Habitat Authority is a joint powers authority dedicated to the acquisition, restoration, and management of open space in the Puente Hills for preservation purposes, with the primary purpose to protect the biological diversity. Additionally, the agency provides opportunities for outdoor education and low-impact recreation and owns and/or manages over 3,800 acres within the Cities of Whittier and La Habra Heights, as well as in the County unincorporated areas of the Puente Hills. The commenter also states that the Habitat Authority strongly endorses the NCCP process, and attaches further comments on the Draft EIR/EIS under Exhibit A of the letter.

Response: Thank you for your comments. The participation of the commenter in the public review of this document is appreciated. The commenter's endorsement of the NCCP process is noted. The comments attached under Exhibit A are addressed separately in responses to comments 9-2 through 9-6 below. No changes to the Plan or Final EIR/EIS are warranted as a result of this comment.

Comment 10-2 Response

Comment: The commenter suggests including a discussion of visitor carrying capacity during development of the Resource Management Plan (RMP) for the Preserves acquired by OCTA.

Response: Each Preserve will have a site-specific RMP, including a public access component that addresses recreational issues and determines allowable uses within each Preserve. See the Master Response B within the Trails/Public Access section of these Response to Comments for a description of the guiding principles OCTA will follow for designating authorized trails for each Preserve. No changes to the Plan or Final EIR/EIS are warranted as a result of this comment.

Comment 10-3 Response

Comment: The commenter recommends designing preserves in such a way so as to prevent further narrowing of wildlife corridors.

Response: The OCTA NCCP/HCP conservation strategy focused on the acquisition of properties that add to and connect existing open space. In all instances, the seven Preserves are located within priority conservation areas as identified in the CBI Conservation Assessment of Orange County (See Figure 6-1 of the Plan). The priority conservation areas are defined as "those currently unprotected lands for which acquisition would be a 'no regrets' decision, based on their contribution to the regional reserve system" (CBI 2009). These Preserves add to the protection of large blocks of natural open space in areas important for regional conservation. The strategic location of these Preserves protects habitat that provides opportunities for movement of native wildlife species, including Covered Species. Management of the Preserves will include activities and actions specific to sustaining effective wildlife movement, specifically installation of wildlife friendly fencing, managed public access to control recreational trail use to a balanced degree, and monitoring (with cameras) that will inform adaptive management decisions.

Comment 10-4 Response

Comment: The commenter recommends the acquisition of additional preserves and that OCTA should consider acquisition and conservation of the Shell-Area Property.

Response: The acquisition of Preserves followed the selection process described in Section 5.4.1 of the Plan, "Selection of Preserves", and used selection criteria included in Appendix D of the Plan. The selected Preserves were deemed appropriate for the goals and objectives of the Plan. Potential future calls for projects allows for consideration of new properties and those already evaluated but not yet purchased. No changes to the Plan or Final EIR/EIS are warranted as a result of this comment.

Comment 10-5 Response

Comment: The commenter notes large mammal movement and bobcats on the Hayashi Property and would like confirmation that the cattle exclusion fencing used on the property will not impede bobcat and mountain lion movement.

Response: The existing fencing around the edge of the property is a three strand fence that is wildlife friendly, and to date, bobcat and mountain lion movement has not been impeded on the property. No changes to the Plan or Final EIR/EIS are warranted as a result of this comment.

Comment 10-6 Response

Comment: The commenter encourages the inclusion of any mitigation measures in the Plan EIR/EIS that would promote wildlife movement and habitat connectivity within the larger Puente-Chino Hills Wildlife Corridor, such as maintenance or construction of wildlife underpasses or overpasses and methods to reduce edge effects to wildlife from adjacent development.

Response: The Plan includes requirements for avoidance and minimization measures during the construction of the covered freeway improvement projects to maintain functionality of existing wildlife crossings. Specifically, the Plan includes a Wildlife Crossing Policy that requires the Construction Lead to evaluate if there are existing wildlife movement corridors along each covered freeway improvement project. If an existing wildlife corridor is deemed an important crossing, then appropriate design features to maintain or improve functionality of that crossing must be included in the project description. No changes to the Plan or Final EIR/EIS are warranted as a result of this comment.

Comment Letter 11: Endangered Habitats League– 2/2/15

From: [Dan Silver](#)
To: [OCTA NCCP HCP Comments](#)
Cc: [Jonathan Snyder](#); [David@Wildlife_Maver](#)
Subject: Comments on OCTA M2 NCCP/HCP
Date: Monday, February 02, 2015 1:40:38 PM

February 2, 2015

Dan Phu, Section Manager
 Orange County Transportation Authority
Attn: M2 NCCP/HCP
 550 South Main Street
 PO Box 14184
 Orange, CA 92863-1584

Dear Mr Phu:

Endangered Habitats League (EHL) is pleased to submit the following comments. Identical comments were also submitted via the comment form.

We congratulate OCTA on the excellent progress many accomplishments to date. We strongly support the proposed NCCP/HCP. Further, we are generally supportive of the comments submitted by the Environmental Coalition. We have these additional comments:

1. Costs of management and monitoring

11-1 For at least the next decade as the endowment is built up, funds available for land acquisition and restoration will be minimal. Yet, many important properties remain under threat of development. In EHL's view, land protection is paramount. If management activities cost less than the conservative estimates currently projected, additional funds could be freed up for acquisition and restoration. To increase the dollars available for time-sensitive acquisition and restoration projects, *we ask that non-essential and non-urgent management and monitoring activities be deferred until after the endowment has been built up.* Excessive species monitoring should simply be eliminated. In "zero sum game" of funding, we have a moral obligation to protect the homes of plants and animals rather than count them.

2. Vegetation treatments

11-2 In regard to potential vegetation treatments, in scrublands (chaparral and coastal sage scrub), landscape-scale vegetation treatments (mastication, grazing, mechanical thinning, chaining, herbicide, fire, etc.) are no longer considered scientifically defensible tools to reduce fire hazard. (The following focused techniques are, however, accepted: maintaining defensible space adjacent to

11-2
cont.

structures, limited clearing along roadways for egress and staging, and strategic firebreaks.) Similarly, vegetation treatments are no longer considered legitimate tools for the general improvement of ecosystem health in scrublands. Therefore, EHL recommends that vegetation treatments including grazing and prescribed burning be strictly limited to well-defined habitat restoration projects, e.g., native grass or forb restoration, native rodent restoration, or control of dense annual grasses. Current understanding of ecosystem health in particular means less fire rather than more, as human-caused ignitions have introduced increased fire frequencies from which scrublands cannot recover. Finally, an opportunity for public input should accompany the preparation of management plans.

Thank you very much for your consideration. If you might acknowledge receipt via return message, that would be much appreciated.

Yours truly,
Dan Silver

Dan Silver, Executive Director
Endangered Habitats League
8424 Santa Monica Blvd., Suite A 592
Los Angeles, CA 90069-4267

213-804-2750
dsilverla@me.com
www.ehleague.org

Response to Comment Letter 11: Endangered Habitats League (EHL) – 2/2/15

Comment 11-1 Response

Comment: The Endangered Habitats League supports the proposed NCCP/HCP and generally supports the comments submitted by the Environmental Coalition included in Letter 11 below. The commenter asks that non-essential and non-urgent management and monitoring activities be deferred until after the endowment for acquisition and restoration has been built up.

Response: Thank you for your comments. The participation of the commenter in the public review of this document is appreciated. The commenter's strong support of the proposed NCCP/ HCP and general support of the comments submitted by the Environmental Coalition have been noted for the record.

It is anticipated that OCTA will establish and manage a permanent, non-wasting endowment to provide funding for long-term commitments of Preserve management and monitoring. Except for the mitigation of impacts to aquatic resources addressed through permitting with U.S. Army Corps of Engineers (USACE) and State Water Resources Control Board (SWRCB), OCTA will prioritize the funding of endowment before allocating M2 EMP revenue to other environmental or mitigation actions or activities. The level of management and monitoring that will be required on the OCTA-acquired Preserves are defined per the guidelines and requirements included in the Plan and developed in collaboration with the Wildlife Agencies to meet the state and federal endangered species regulations. The costs for the management and monitoring in the Plan are estimates and the actual costs may decrease, at which time OCTA would be able to also decrease the endowment funding. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 11-2 Response

Comment: The commenter recommends that vegetation treatments including grazing and prescribed burning be strictly limited to well-defined habitat restoration projects and proposes the opportunity for public input in the preparation of management plans.

Response: Comment noted. Given the size and location of the OCTA acquired Preserves, prescribed burning is not anticipated to be utilized. However, grazing is an option that may be considered. For example, goats have been historically utilized on the Aliso Canyon property to assist with fire/fuel management in partnership with a biological monitor to ensure that sensitive resources are not negatively impacted. This is an option that would still be evaluated for the continuing management of this Preserve. Specific vegetation management techniques for each individual Preserve will be considered and evaluated as part of the development of the Preserve-specific RMPs. The Final Plan and EIR/EIS have been revised to remove prescribed burning as a potential option.

OCTA is committed to providing the opportunity for public input during the preparation of the RMPs. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 12: Environmental Coalition– 2/4/15

The Environmental Coalition Supports Alternative 2 (The Proposed Plan)

February 4, 2015

Dan Phu, Section Manager
 ATTN: M2 NCCP/HCP
 Orange County Transportation Authority
 550 Main Street
 Orange, CA 92863

Dear Mr. Phu:

The Environmental Coalition that Supported Renewed Measure M (M2) has completed its review of the Orange County Transportation Authority's (OCTA) Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP and/or Conservation Plans) and associated Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Environmental Mitigation Program (EMP).

BACKGROUND

It is exciting to see Friends of Harbors, Beaches and Park's (FHBP) early community-based work in the form of the Orange County Green Vision Map, with the passage of Measure M2, evolve into a formal Conservation Plan supporting landscape scale environmental mitigation for OCTA's Freeway Projects. OCTA's commitment to this effort and its leadership has been very important. We applaud this first-of-a-kind process and conservation project in California. While there are other NCCP/HCPs in the state, this is the first we are aware of that made full use of a Greenprint (the Green Vision Map), its data and analysis, assembled through broad based input by the non-profit community under FHBP's leadership and consultants.

12-1

The progression of work steps after the passage of Measure M2 is also worth mention here. Essentially the Green Vision Map with additional stakeholder, expert, and agency work, became the baseline inventory to support "regional advanced mitigation" for selection of acquisition projects capable of delivering the permits by the Resource Agencies and mitigation necessary for the Freeway Projects contemplated in Measure M2. Those early acquisition and restoration projects were undertaken in advance of the completion of the formal Conservation Plans. When adopted the Conservation Plans would document the adequacy of the mitigation projects selected and completed as mitigating the freeway projects (with the exception of U.S. Army Corps of Engineers and Regional Water Quality Control Board permits).

The completion of the Draft Conservation Plans is a major milestone in this effort. The Conservation Plans are just that, plans for landscape scale conservation. Under California Department of Fish and Wildlife's (CDFW) NCCP program, this of the Conservation Plan identifies and provides for the regional protection of plants, animals, and habitat while allowing compatible and appropriate economic activity, in this case the freeway improvement projects. The NCCP provides the scientific evidence to allow permits to be issued in a streamlined manner because biological impacts have been identified, analyzed, and mitigated. The CDFW's

- 12-1
cont.
- involvement in the planning process has been essential to ensuring that biological goals and objectives for these species and habitats will be met as required for the freeway projects.
- The federal portion, or HCP, likewise is a planning document required as part of a project application, in this case the freeway projects, to cover incidental take. Like NCCPs, HCPs can apply to both listed and non-listed species, including those that are candidates for listing or likely to be listed in the future, providing coverage for that possibility. The U.S. Fish and Wildlife Service (USFWS) led the effort to complete the Draft HCP portion of the Conservation Plans. The Conservation Plans reflect the significant commitment of USFWS staff in its scientific rigor, analysis, and recommendations. Conserving species before they are in danger can provide early benefits and prevent the need for listing. OCTA could have taken a different route to secure project permits, one that would have more likely resulted in piecemeal mitigation rather than regional landscape scale durable mitigation.
- Finally, the Conservation Plans provide a framework for other agencies to potentially “tier from” and amend to cover other “economic activities” to the extent mitigation opportunities remain available to mitigate additional impacts from infrastructure and other development projects. We believe that such “tiering” has the potential to generate additional funding by appropriate projects that would secure the biological goals and objectives beyond the mitigation required by the freeway projects.
- SUPPORT FOR ALTERNATIVE 2**
- Needless to say we are pleased with the progress made thus far and offer the following comments intended to further strengthen the document, ensure findings under the NCCP and HCP statutes are met, and the conservation outcomes achieved. As we provide this substantive feedback and questions, we simultaneously support Alternative 2 (the Proposed Plan).
- EIR/EIS COMMENTS**
- 12-2
- Chapter ES – Executive Summary**
1A. Background of the Proposed Plan (page ES-2)
- OCTA updates its Long Range Transportation Plan (LRTP) every four years and three LRTPs have been published/adopted since Renewed Measure M passed in 2006. Please clarify in this introductory paragraph that the LRTP being referenced is from the 2006 document.
- Chapter 1 – Introduction/Purpose and Need**
2A. Overview of the Proposed NCCP/HCP (page 1-2)
- 12-3
- While this section relates specifically to the Conservation Plans, setting the stage in the first paragraph is important. Specifically that OCTA intends to fulfill its commitment to the Renewed Measure M Ordinance #3 language, which states (on page B-5 of the Ordinance #3 [the Ordinance]) “At least five percent (5%) of the net revenues allocated for freeway projects shall be available for purposes of programmatic mitigation.” OCTA is undertaking the Conservation Plans to fulfill a portion of the commitment necessary to secure the freeway project permits from CDFW and USFWS. Ongoing Committee, Board, and stakeholder engagement will be essential to determining additional mitigation for the Army Corps and Regional Board permits,

12-3 | and beyond the freeway projects, specific implementation measures to complete the program
 cont. | Ordinance’s commitment.

2B. Plan and Permit Area (Figure 1-2, one page before page 1-6)

12-4 | It is difficult to read this map with the light (mint) green coloring for natural lands. Please revise the map using a medium green for this layer for ease of understanding. It also appears that two properties (Cielo Vista and Esperanza Hills) in the Sphere of Influence of Yorba Linda have been left off of the Natural Lands designation. Please confirm inclusion of Assessor Parcel Numbers (APNs):

- 326-031-06
- 351-031-04, 05, 06, and 17

2C. Regional Conservation Planning Efforts (Figure 1-3, one page after 1-6)

It is difficult to read this map with the light (mint) green coloring for natural lands. Please revise the map using a medium green for ease of understanding. With this subtle coloring it appears that the only natural lands left are in Fullerton (West Coyote Hills), Brea and Yorba Linda (Puente-Chino Hills Wildlife Corridor), Huntington Beach (Bolsa Chica and Harriett Wieder Regional Park) and Seal Beach (the Wildlife Refuge). Since the goal of the map is to show Regional Conservation Plan Areas it may actually be more relevant to remove the three extraneous layers from the map, including: Natural Habitats, Agriculture, and Developed.

2D. Alternative 2: Proposed NCCP/HCP (Proposed Plan): Management Activities (page 2-10)

12-5 | The document states “Grazing and prescribed burning are not anticipated to be used for large-scale vegetation management but may be used selectively to target specific locations or vegetation management issues within the preserves, provided they are used consistent with the Proposed Plan biological goals and objectives.”

Based on the increased fire frequency in Southern California, specifically chaparral and coastal sage scrub habitats, the Environmental Coalition does not support use of prescribed burns in the Preserves. Many areas included in the Conservation Plan already have a fire frequency far in excess of natural fire regimes. Our research indicates 98% of the fire ignitions are human caused.

Similar concerns apply to other vegetation treatments (mastication, grazing, mechanical thinning, removal, herbicide, etc.) as a tool for fire risk reduction or ecosystem health. In chaparral and scrub habitats, landscape scale vegetation treatments do not have scientific support, according to the most recent and compelling literature. The scientific literature only supports limited vegetation treatment to provide approximately 100 feet of defensible space around habitable structures, limited clearing (e.g., 15 feet along each side of roadways for egress or equipment staging), and carefully sited strategic fire breaks for purposes of firefighter access.

There is an abundance of scientific literature emerging about the use of grazing for vegetation management. It seems odd that OCTA has worked with interim land managers to remove cattle

12-5 cont.	<p>grazing and/or prevent it on the existing Preserves and yet proposes it for vegetation management in the EIR/EIS, especially without quantification or identification of the types of grazing animals OCTA and/or Preserve land managers would use (cattle, sheep, goats, or horses, etc.)</p> <p>For example, should horses be used as part of the grazing plan, research indicates horses generate waste containing contaminants such as nitrates, arsenic, copper and selenium among other pathogens. (See Attachment A)</p> <p>Before employing grazing, there needs to be additional research of the benefits and potential impacts of grazing as compared with other vegetation management options including mechanical and in some cases hand treatment (e.g., a trained “weed warriors” program), integrated pest management, and/or additional habitat protection and restoration.</p> <p>If grazing as an option is determined after additional stakeholder engaged research and review, fulfills a unique and essential management need, a Grazing Management Plan should be prepared that specifies: appropriate forage utilization in each grazing unit, monitoring to verify goals are being met, and identification of areas where grazing shall be excluded (e.g., areas where grazing otherwise might be suitable, but where grazing could impact species and habitat such as wetlands, riparian corridors, and areas where native species are struggling to take hold, etc.).</p> <p>If deemed an appropriate management tool, the Grazing Management Plan shall provide a template for other such plans in the region on both public and private land (private land where landowners may be open to modifying grazing practices to restore the health of their land and prolong its economic productivity for a range of ecosystem services including managed grazing).</p> <p>To be clear based on the scientific literature, we do not support grazing nor controlled burns on the OCTA Preserves.</p>
12-6	<p>2E. Administration of Funding for Long Term Commitments (page 2-27)</p> <p>Though accurate that OCTA has not made any other commitments for spending M2 EMP revenues beyond the obligations to implement the Plan, please outline the efforts underway by the Finance Ad-Hoc Working Group. Specifically, that the Environmental Oversight Committee (EOC) will be considering the Guiding Principles developed by the Ad-Hoc Working Group and will be presented with the suite options for allocating future revenues. After further discussion, recommendations will be made to the Finance and Administration Committee and the full OCTA Board for approval.</p>
12-7	<p>Chapter 3 – Environmental Setting</p> <p>3A. City of Brea General Plan and Amendment (page 3.9-1)</p> <p>The Hillside Development Policy was implemented via adopted development standards and guidelines codified in Brea’s zoning ordinance. This information should be updated.</p>

12-8 | **3B. Department of Parks and Recreation: Chino Hills State Park (page 3.9-6)**
 The acreage of Chino Hills State Park within the Plan Area (and Orange County) is incorrect. Orange County’s portion is nearly half the State Park: 6,994 acres. See the Chino Hills State Park – Orange County Parcels List as **Attachment B**.

12-9 | **3C. Private Conservation Areas: The Irvine Company (page 3.9-7)**
 Following The Irvine Company’s significant contributions to the natural lands repository, the Company can no longer be described as a major landowner in terms of acres of privately held conservation lands. The Company’s participation in the Central-Coastal Conservation Plan contributed to the nearly 38,000 acres protected through those agreements and conservation easements, as outlined on page 3.9-6. Additionally, the Company’s recent transfers and previous donations to the County of Orange are mostly contained under the 60,000 acres included in the OC Parks and City Park system network, as listed on page 3.9-8. Consequently, The Irvine Company can be removed from the list of “significant private conservation areas” as its conserved lands have already been incorporated under other categories.

These same comments apply to the Chapter 4: Introduction on page 4.1-4.

12-10 | **3D. Private Conservation Areas: The Wildlands Conservancy (3.9-8)**
 The Wildlands Conservancy also owns the Irvine Mesa and Black Star Canyon—two other conservation areas in private ownership. This land includes 670 acres. The parcels listed under Comment 7A & 7B (second bullet) for the Conservancy’s ownership listing should be included on the maps/acreage for Private Conservation Areas.

These same comments apply to the Chapter 4: Introduction on page 4.1-4.

12-11 | **3E. Private Conservation Areas: OC Parks (3.9-8)**
 The Irvine Company’s recent donation of 2,493 acres has not been included in the OC Parks acreage as it was just completed in December 2014. This acreage should be adjusted upward by 2,493 acres to account for this recent change of ownership and addition to the network of conserved lands.

Chapter 4: Environmental Impacts and Mitigation Measure

4A. Biological Resources (Section 4.4): Impact BIO-9 (page 4.4-12)

We disagree with the statement under Impact BIO 9 (page 4.4.12):

12-12 | “In all cases, covered freeway improvement projects would be designed to improve existing freeway infrastructure, and, therefore, wildlife movement and habitat connectivity/fragmentation effects have already occurred within original construction of these roadways. For the most part, the covered freeway improvement projects occur within urbanized areas where habitat connectivity is not an issue.”

While the initial impact may have already occurred when the freeway was built, this language does not take into consideration additional impacts to wildlife corridors and corridor usage as freeway capacity is expanded through construction of additional lanes. While the lanes may be

<p>12-12 cont.</p>	<p>contained within the existing right-of-way for the freeway improvement project, when wildlife corridor length is increased there is a direct impact to the species using it. In other words, the distance an animal must travel via corridor to get from one habitat area to the next increases. This can, thereby, substantially decrease use of the corridor depending on the species. As referenced in the Caltrans Wildlife Crossing Guidance Manual (Appendix G, page 58), changing the openness ratio can impact the species using said corridor. Further, adding more lanes decreases the natural light within a wildlife underpass, which also impacts species utilizing the corridor. This can be overcome with lighting (Appendix G, page xiii). Lengthened underpasses can also limit the ability of plants to grow underneath and provide suitable cover for wildlife—again impacting use.</p> <p>Finally, because impacts to existing Wildlife Corridors was a potential possibility within the 13 freeway improvement projects, the Ordinance included language addressing existing mitigation features such as functioning wildlife corridors. Specifically, the Ordinance states (page B-2/B-3):</p> <p style="padding-left: 40px;">“P. Programmatic Mitigation: Permanent protection of areas of high ecological value, and associated restoration, management and monitoring, to comprehensively compensate for numerous, smaller impacts associated with individual transportation projects. Continued function of existing mitigation features, such as wildlife passages, is not included.”</p> <p>We believe Coal Canyon (at the 91 Freeway) and the Coast to Cleveland Connection (aka the Great Park Corridor at the 5 Freeway), apply to the existing mitigation features language. We suggest modifying the language in Impact BIO-9 to acknowledge the impacts additional lanes can have to existing wildlife corridors including corridor length, openness ratio, lighting, and natural vegetation/cover.</p>
<p>12-13</p>	<p>4B. Table 4.4-6 – Biological Goals, Objectives, and Conservation Areas: Species Objective 12.4 (page 4.4-32)</p> <p>Clarifying language about the definition of programmatic mitigation contained in the Ordinance (quoted above) should be included. In short, funds from the individual freeway program’s budget, not the EMP, should be used to maintain continued function of wildlife passages.</p>
<p>12-14</p>	<p>4C. Methodology and Significance Criteria (Cultural Resources) (page 4.5-1)</p> <p>This section should be revised throughout to add AB 52. This legislation, passed in 2014, requires that lead agencies to evaluate, just as they do for other historical and archeological resources under the California Environmental Quality Act, a project’s potential impact to a “tribal cultural resource.” (See Attachment C)</p>
<p>12-15</p>	<p>4D. Impacts from Covered Freeway Improvement Projects (page 4.5-5)</p> <p>The LRTP referenced in Appendix E is from 2006. Though more applicable to future LRTPs, we request that descriptions of all programmatic mitigation measures be revised to reflect the fact</p>

12-15 cont.	that archaeological data recovery excavations do not constitute mitigation for impacts to tribal cultural resources.
12-16	<p>4E. Alternative 2: Proposed Plan (page 4.5-7) That archaeological data recovery excavations do not mitigate for the loss of tribal cultural resources should also be included in Mitigation Measure CR-2-4 and CR-7.</p>
12-17	<p>4F. Impacts from Biological Mitigation and Conservation Activities: Impact LU-7 (page 4.9-4) The second to the last sentence reads: "Individual project mitigation would not divide established or planned communities because the focus of mitigation would be on preservation and restoration of existing disturbed habitats." As it stands, it reads that the mitigation aim is to preserve existing disturbed lands, which is not the intent of the EMP or the Conservation Plans. Please revise this to say: "Individual project mitigation would not divide established or planned communities because the focus of mitigation would be on preservation of <u>natural lands</u> and restoration of existing disturbed habitats." (Emphasis added for clarifying purposes)</p>
12-18	<p><u>Conservation Plan Comments</u> Chapter ES: Executive Summary 5A. Table ES-2 Biological Goals, Objectives and Conservation Actions (cont.) (page ES-10) Landscape Objective 2.1 We submit the same comments as 4B above from the EIR/EIS.</p>
12-19	<p>Chapter 1: Introduction 6A. Table 1-1 Covered Species (page 1-6) We were pleased to see the California Native Plant Society's special status ranking included in this table.</p>
12-20	<p>Chapter 2: Physical Setting, Land Use and Biological Resources 7A. Figure 2-4 – Protected and Unprotected Natural Habitat (two pages before page 2-10) 7B. Figure 2-5 – Land Ownership of Protected Natural Areas (one page before page 2-10) The following adjustments should be made to both above listed figures [maps] to make them factually correct:</p> <ul style="list-style-type: none"> • Removal of the Lower Tonner Canyon parcels These lands are owned by the City of Industry and are not protected. Please remove APNs: <ul style="list-style-type: none"> ○ 306-021-01, 02, 16, 17, and 19 ○ 308-031-18 and 32 • Addition of the Irvine Mesa & Black Star Canyon parcels These lands are owned by The Wildlands Conservancy and are protected in the same manner as Hidden Ranch and Big Oak Canyon. Please add APNs: <ul style="list-style-type: none"> ○ 105-040-29

12-20 cont.	<ul style="list-style-type: none"> ○ 105-051-18, 21, 33, 36, and 57 ○ 105-060-09 and 19 ○ 876-011-02, 03, 07, 08, 11, 18, and 19 ○ 876-021-03, 04, 05, 06, and 15 <ul style="list-style-type: none"> ● Addition of The Irvine Company ~2,500 acres The Irvine Company donated lands to the County and should be included in the repository of protected lands categorized under OC Parks ownership. Parcel numbers are not available; please see Attachment D for the map approved by the Board of Supervisors in November 2014. <p>Additionally, it is difficult to read Figure 2-4 and Figure 2-5 with the light (mint) green coloring for unprotected natural lands. Please adjust the color of this particular layer to a medium green or using a hatched or striped pattern to better delineate the unprotected natural lands.</p> <p>Finally, in Figure 2-5 the Irvine Ranch Open Space is owned by OC Parks and should be in yellow, not red, to designate its "local ownership."</p>
12-21	<p>7C. Private Conservation Areas (page 2-13) We submit the same comments as 3C-E above from the EIR/EIS.</p>
12-22	<p>Chapter 3: Covered Projects and Activities 8A. Covered Activities within the Natural Communities Conservation Plan/Habitat Conservation Plan Preserves: Recreational Facilities and Maintenance (page 3-7) The document should be consistent in noting that per the EIR/EIS (page 2-10) there is a cap of 11 acres (approximately 1% of the natural habitat) within the combined Preserve system that can be permanently impacted through these recreational facilities.</p>
12-23	<p>8B. Management Activities: Vegetation Management (page 3-7) We submit the same comments as 2D above from the EIR/EIS.</p>
12-24	<p>Chapter 4: Impact Assessment and Level of Take 9A. Type and Amounts of Effects: Habitat Connectivity (page 4-5) We submit the same comments as 4A above from the EIR/EIS.</p>
12-25	<p>9B. Effects on Natural Communities/Land Cover (page 4-12) We suggest including a new map showing the effects on natural communities as outlined in Table 4-5, similar to the species specific maps of the covered species (Figures 4-3 through 4-15).</p>
12-26	<p>Chapter 5: Conservation Strategy 10A. Selection of Preserves (page 4-5) The 2008 Call for Projects included more than willing sellers. The Environmental Coalition submitted a handful of potential acquisition sites as well. It would be more inclusive to state that the proposals were submitted from the public, non-profits, local agencies, and willing seller landowners.</p>

- 12-27

10B. Hayashi: Regional Significance (page 5-19)
 The Carbon Canyon Specific Plan was extinguished when the 2003 Brea General Plan was adopted. Please correct this section. Additionally, Chino Hills State Park’s acreage should be consistent with previous and accurate reporting of 14,102 acres.
- 12-28

10C. Preserves (page 5-10 through 5-22)
 The document should contain parallel construction between the acquisition and restoration project selection sections. The groupings and associated explanations for the acquisition projects should be included on page 5-10 within section 5.4.1, similar to what has been done in the restoration section on page 5-23 within section 5.5.1.
- 12-29

Chapter 6: Conservation Analysis
11A. Figure 6-3 – OCTA NCCP/HCP Preserves and Restoration Projects Relative to Protected Lands
11B. Figure 6-5 – OCTA NCCP/HCP Preserves and Restoration Projects Relative to Elevation Ranges
11C. Figure 6-6 – OCTA NCCP/HCP Preserves and Restoration Projects Relative to Watersheds
11D. Figure 6-7 – OCTA NCCP/HCP Preserves and Restoration Projects Relative to Natural Communities
 We submit the same comments as 7A-B above from the Conservation Plans.
- 12-30

11E. Western Pond Turtle: Species Objective 7.2 (page 6-52)
 It may be helpful to include that post Freeway Complex Fire numerous agencies and non-profits partnered to remove the non-native species *Arundo donax* from Carbon Creek thereby expanding aestivation and nesting habitat adjacent to the Hayashi property. More information can be obtained from the Santa Ana Watershed Authority, Carbon Canyon Fire Safe Council, Chino Hills State Park, and/or Hills For Everyone.
- 12-31

11F. Mountain Lion (page 6-85)
 Multiple (some verified) observations of mountain lions have occurred in Olinda Village nearby to the Hayashi property within the past three years as reported to the California Department of Parks and Recreation.

 Additionally under Species Objective 13.4 (page 6-88) we submit the same comments as 4A above from the EIR/EIS.
- 12-32

Chapter 7: Management and Monitoring
12A. Fencing (page 7-11)
 We support the concept of using an adaptive management approach for the wildlife fencing.
- 12-33

12B. Land Uses Within Preserves: Conditionally Allowed Uses (page 7-12)
 While we look forward to reviewing the Resource Management Plans (RMP) for each of the OCTA Preserves, we’d like to ensure that the “creation of trails” on the OCTA Preserves be

- 12-33
cont.

authorized trail creation and that the RMPs outline how the land managers will address unauthorized trail creation. There should be a strong commitment to enforcement, immediate trail closure, and restoration efforts should unauthorized trails be created.
- 12-34

12C. Land Uses Within Preserves: Prohibited Uses (page 7-13)
Based on the recent issues related to unauthorized access and unauthorized trail creation on several OCTA Preserves and neighboring properties, please delineate that trail creation and/or expansion will be prohibited by OCTA.
- 12-35

12D. Land Uses Within Preserves: Public Access (page 7-13)
Under the second bullet, please outline some of the sensitive resources that could be impacted from a public access standpoint, for example, riparian areas. Signage is essential to ensuring proper and appropriate trail use and should be included here and in the RMPs.
- 12-36

12E. Land Uses Within Preserves: Recreation (page 7-15)
Please add under the second bullet, including signage to demarcate both authorized and unauthorized trails on the OCTA Preserves.
- 12-37

12F. Land Uses Within Preserves: Passive Uses (page 7-16)
Hiking should be specifically called out under Passive Uses or Day Use of the Preserves. As it is written now, it is not an activity explicitly outlined as an appropriate use, while equestrian and mountain biking are both listed.
- 12-38

12G. Land Uses Within Preserves: Mountain Biking (page 7-16)
OCTA should include the incorporation of speed limits for the mountain biking community and post appropriate signage to this end.
- 12-39

12H. Land Uses Within Preserves: Enforcement of Public Access (page 7-17)
Stronger penalties for repeat offenders, such as incrementally increased ticketing fines and possible banning from use of the Preserve, should be considered.

There may also be an opportunity to incorporate Service Learning Programs within the OCTA Preserves. We suggest consideration of this opportunity in the Plan. Inside the Outdoors and the Orange County Department of Education would be good resources for such endeavors.
- 12-40

12I. Natural Communities: Conservation Strategy (page 7-84)
The document should include parallel construction between the acquisition and restoration sections. In short, a similar sentence included under the acquisition section should outline that there are remaining funds available from previous rounds of acquisition, as seen in the restoration section.

- 12-41 **12J. Potential Adaptive Management Issues at the Preserves (including threats, uncertainties, research needs) (page 7-84)**
 The recent discovery of the Goldspotted Oak Borer (*Agrilus auroguttatus*) in approximately 30 trees at Weir Canyon in northern Orange County introduces a large and new threat to the County's oak forests. The infected trees are on regional park/reserve land and within a mile of homes. This is a timely and relevant adaptive management issue that we wholly recommend for inclusion in the Management and Monitoring section. Should you require more information, researchers at University of California, Riverside are spearheading the effort to address this threat.
- Further, the County of Orange recently discovered other pests, specifically the Polyphagous Shot Hole Borer, Oak Ambrosia Beetle (*Monarthrum scutellare*), and *Fusarium* Dieback Fungus, in the Coast Live Oaks of the Trabuco Canyon Area (See **Attachments E and F**). These pests as well is yet another challenge facing regional oak stands that we recommend be considered for inclusion on the pest list.
- 12-42 **12K. Adaptive Management Objective (top of page 7-86)**
 It may be helpful to also coordinate with the U.S. Forest Service, CalFire, State Parks, and OC Parks, to name a few, in the fire management plans. Additionally several non-profit organizations including Hills For Everyone, Friends of Harbors, Beaches and Parks, and the California Chaparral Institute are resources for OCTA in this arena as well.
- 12-43 **Chapter 8: Plan Implementation**
13A. Administration of Funding for Long-Term Commitments (page 8-9)
 The EOC has been instrumental in its development and oversight of the EMP. Please include the Committee in the list of entities involved in the recommendations made regarding the endowment under the third bullet.
- 12-44 **13B. Table 8-2 Estimate of Funding Requirements for Permanent Endowment (page 8-11)**
 The Coalition has concerns about the high costs for the Preserve Management (as outlined in Table 8-2). We'd like to reiterate our position and support, which aligns with the EOC, the Finance and Administration Committee, and OCTA Board decisions, for the feedback loop for the endowment as it informs future decisions about the needed funds for the non-wasting endowment and provides meaningful opportunities to update and adjust the endowment deposits based on current facts/costs. This feedback loops means the endowment deposits/needs are reviewed every two years to account for fluctuations in management costs as experience is gained and management costs are (hopefully) reduced.
- Further, species monitoring and other management activities should be appropriately timed over the life of the Plan so that excessive and unnecessary costs are not mandated during the first 10-15 years.

12-45	<p>13C. Fire (page 8-19) The limited scope of the changed circumstance for fires namely “three fires in a 50 year period” may need further refinement. Probably many OCTA Preserves have experienced three fires in the last 50 years. Southern California is known to have an unnatural fire frequency, a very different scenario than Northern California pine forests.</p> <p>Further, if three fires occur within an existing Preserve or restoration site, the language as written doesn’t take into consideration the size of the fire, intensity, burn pattern, and how many acres of the OCTA Preserve were burned. Please quantify these details that prompt a changed circumstance as well document what caused the fire ignition in the first place.</p>
12-46	<p>Appendices Comments Appendix A: Glossary 14A. Urban-Wildland Interface (Appendix A, page 12) The document defines the Urban-Wildland Interface as: “The narrow zone (<100 feet) between dense urban development and natural land cover in which structures can be built to minimize the damaging indirect effects on Covered Species or habitats of activities within urban areas.”</p> <p>First, to maintain consistency with the language used throughout the EIR/EIS and Conservation Plans, we’d recommend calling it the Wildland-Urban Interface (WUI).</p> <p>Second, the definition of the WUI should be reconsidered. There are too many unclear terms used in the existing definition. For example, if it is “dense urban development,” it is likely not at the interface and instead more likely located in the urban core areas. Much of Orange County’s WUI development is suburban and rural. We’d recommend using the CalFire definition: “Wildland Urban Interface (WUI) – The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.” (See Attachment G)</p>
12-47	<p>Appendix B: Implementing Agreement 15A. Resource Management Plans: Recreational Uses (Appendix B, page 13) We were pleased to see the inclusion of thoughtful recreational uses and recreational planning in the Draft Implementing Agreement that took into consideration appropriate constraints to protect the Covered Species and natural communities.</p>
12-48	<p>15B. Monitoring and Reporting: Annual Report (Appendix B, page 24) We request OCTA clarify when the first Annual Report will actually be filed.</p>
12-49	<p>Appendix C.5: CBI Conservation Assessment 16A. Core Habitat Areas (Appendix C, page C.5-3) Please define “protected” before describing how much land is protected within each of the Core Habitat Areas. For example, an estimated 88% of the Santa Ana Mountains Core Habitat Area is protected. Is it protected only by public agencies for the purpose of natural lands?</p>

12-49 cont.	Could it be in private (non-profit or land trust) ownership and be considered protected? A definition would be most helpful.
12-50	<p>Appendix C.6: Baseline Biological Survey Reports – Hayashi and South County Properties 17A. Exhibit 1 – Regional Location Map (Hayashi Report) (Appendix C-6, before page 2) The GIS layer for Chino Hills State Park is incorrect. For your information, the public can download the GIS files for all of California’s State Parks at: http://portal.gis.ca.gov/geoportal/catalog/search/resource/details.page?uuid=%7B1D60169E-220F-4088-A349-9CAF1C6AB9F4%7D (Link 1)</p> <p>For your benefit, we’ve included the GIS shapefile from the above link as a zipfile (See Attachment H). This layer will provide accurate information and improve the context.</p>
12-51	<p>17B. Exhibit 4 – Regional Environmental Setting (Hayashi Report) (Appendix C-6, before page 4) The Firestone Boy Scout Reservation is not protected as it is in private ownership with no conservation overlay or easement. Additionally, the entire Irvine Ranch Open Space lands and Central-Coastal Conservation Plan preserves are missing from this map and should be integrated to provide a more accurate regional environmental setting.</p>
12-52	<p>17C. Special Status Plant Species (Appendix C-6, page 8) It appears the first paragraph on this page has been copied from the South County Baseline Biological Reports. Please update this information for the Hayashi property specifically.</p>
12-53	<p>17D. Regional Environmental Setting (Appendix C-6, page 3) It appears the first paragraph in this section has been copied from the Hayashi Baseline Biological Reports. Please update this information for the South County Properties specifically.</p>
12-54	<p>17E. Regional Environmental Setting (South County Properties) (Appendix C-6, two pages before page 4) The ~100 acres owned CDFW [as the CDFW Hafen Reserve] is missing from the regional environmental setting. This protected natural land, justifies the OCTA Hafen and Ferber Ranch Preserve connections and should be included on the map to provide a more accurate context.</p>
12-55	<p>17F. Fire History (South County Properties) (Appendix C-6, page 5) The document states 25 separate fires, but the map (Exhibit 5) shows four fires. Based on our data from CalFire it appears that only four fires have burned. This assertion of 25 fires needs to be corrected or clarified because it doesn’t align with the figures in the document.</p>
12-56	<p>17G. Developed/Non-Native (South County Properties) (Appendix C-6, page 20) It was interesting to see that a eucalyptus grove was documented on the Ferber Ranch property. Does OCTA have any plans to study or remove of this non-native, highly flammable plant from the Preserve?</p>

12-57

Appendix I: Science Advisors Report**18A. Biological Goals and Objectives (Appendix I, page 5)**

We were pleased to see OCTA had convened an Independent Science Advisory Board to contribute to this Conservation Plan. We agree with the Science Advisors that Conservation Plan terms lack measurable and tangible targets. We recommend use of the SMART objectives format: Specific, Measurable, Achievable, Relevant, and Timely to hone in on quantifiable biological goals.

Thank you for the opportunity to comment on the Conservation Plans and associated environmental documents. We look forward to the final versions of both.

Sincerely,

Amigos de Bolsa Chica ▪ California Oaks Foundation ▪ California Cultural Resource Preservation Alliance ▪ Canyon Land Conservation Fund ▪ Chino Hills State Park Interpretive Association ▪ Earth Resource Foundation ▪ Friends of Coyote Hills ▪ Friends of Harbors, Beaches and Parks ▪ Friends of Newport Coast ▪ Hills For Everyone ▪ Inter Canyon League ▪ Inland Empire Waterkeeper ▪ Laguna Canyon Conservancy ▪ Laguna Greenbelt, Inc. ▪ Latino Health Access ▪ Newport Bay Conservancy ▪ Orange County Interfaith Coalition for the Environment ▪ Orange County Coastkeeper ▪ Planning and Conservation League ▪ Saddleback Canyons Conservancy ▪ Silverado-Modjeska Recreation and Park District ▪ Stop Polluting Our Newport ▪ The Conservation Fund ▪ The Nature Conservancy ▪ The Trust for Public Land ▪ Wild Heritage Planners ▪ Women For: Orange County

Attachments:

- A – “Equestrian Estates in Silverado Canyon,” Everyday Heroes Excerpt (reference at top of third column)
- B – Chino Hills State Park – Orange County Parcels
- C – Assembly Bill 52
- D – Maps of the November 2014 Irvine Company Donation
- E – Orange County Public Works Pest Notification
- F – Orange County Public Works Pest Identification
- G – State Board of Forestry and Fire Protection, Appendix E – Glossary
- H – GIS Shapefiles for Chino Hills State Park

14

Everyday Heroes Protect the Air We Breathe, the Water We Drink, and the Natural Areas We Prize

THIRTY-FIVE YEARS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

Project Manager: Karen Douglas

Research Director and Lead Editor: Matt Vander Sluis
Staff Writer, Design Manager, and Editor: Ian Douglas
Research and Outreach: Erin Beller

Copy Editor: Barbara Barrigan-Parrilla

This publication was made possible by the generous support of Water for California,
The Resources Legacy Fund Foundation, Benjamin C. Hammett,
and Bob Williams and Meg Caldwell.



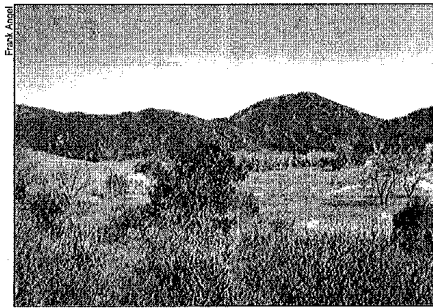
Equestrian Estates in Silverado Canyon: Protecting Orange County's Water Quality

By Frank P. Angel and Ed Grutzmacher

Water quality is of great interest to the citizens of Orange County and other coastal jurisdictions, which are struggling to reduce pollution from urban runoff. Concern is growing not only for affected fish and wildlife species but humans as well. Popular surfing spots along most of Orange County's coast have long been plagued by recurring bacterial contamination and pollution from cancer-causing chemicals and metals, carried in increasing volumes of stormwater runoff and dry weather urban runoff associated with increasing urbanization. Frequent beach closures from high bacterial counts in coastal waters interfere with the public's historic right of access to the ocean and reduce tourism-oriented revenue. Fortunately, an important 2004 CEQA suit brought by an Orange County environmental advocacy group, Rural Canyons Conservation Fund (RCCF), has opened the door to cleaner runoff and improved water quality in Orange County and across the state.

In 2003, Las Vegas-based CCRC Farms, LLC submitted an Environmental Impact Report (EIR) for an equestrian estate subdivision on 70 acres of open space in Orange County's Silverado Canyon. The

site of the subdivision is part of a larger property known as Holtz Ranch, located along a major gateway to and within the boundaries of Cleveland National Forest, the southern-most national forest in California, separating Orange and Riverside counties. Stormwater



Developers planned to build an equestrian estate subdivision on this section of the Holtz Ranch in Orange County. Because of CEQA, the Rural Canyons Conservation Fund was able to ensure that the impacts of horse waste on local water supplies would be identified and mitigated.

runs off the hills of Silverado Canyon into Silverado Creek, then into Santiago Creek, a recovery area for the endangered Arroyo Toad. It joins with the Santa Ana River and finally empties into the Pacific Ocean near Newport Beach.

The subdivider proposed to build twelve single-family estates on lots averaging 5.3 acres, as well as roads and other infrastructure facilities. The project design placed the building pads mainly on gradually sloping land surrounded by a

“bowl” of hills, with the pads extending into and forcing grading in the hills.

Local residents were initially concerned about the proposal because the equestrian estates would accommodate horse barns and facilities. Equestrian uses are known to generate wastes containing contaminants such as nitrates, arsenic, copper, selenium and the gastrointestinal disease-causing pathogens *Cryptosporidium*, *Giardia*, *Lambia* and *Salmonella*. According to the EPA, the average horse produces about forty-five pounds of fecal waste each day, raising the prominence of adverse project impacts on water quality.

In this case, the project EIR claimed, without supporting evidence, that existing baseline water quality conditions were worse than future conditions with the project. The EIR simply based this claim on the fact that portions of Holtz Ranch had been used for agricultural purposes decades ago, stating that pollutants such as sediments, nutrients, and pesticides are “generally considered” to be pollutants associated with agricultural uses. Because of the EIR's inadequate analysis of water quality impacts, RCCF challenged the County's approval of the EIR.

The Orange County Superior Court found unacceptable the lack of any study to determine what pollutants, if any, currently flow into nearby Silverado Creek from Holtz Ranch. Judge C. Robert Jameson wrote that “[w]ithout a baseline study identifying the types and amounts of

review process ordered by the court, concerned citizens, public interest stakeholder organizations, their experts, and the county’s own officials now will have the opportunity to learn about the relevant site-specific water quality baseline, and to assess actual water quality

The court repudiated a practice which appears to have been common in Orange County, allowing developers to wait until after a project is approved to determine how they will protect water quality.

pollutants currently existing in storm water runoff, the actual effects of the project on surface water quality cannot be compared and determined, nor can the adequacy of any mitigation measures be assessed.”

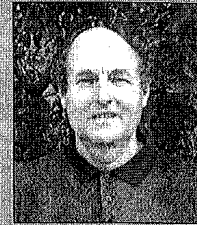
The court in this case repudiated a practice which appears to have been common in Orange County, of allowing developers to wait until after a project is approved to determine how they will protect water quality. RCCF hopes the court’s ruling will encourage the county to change its old ways and ensure that future project EIRs disclose to the public and county decision makers all information relevant to protecting stream and coastal water quality, including detailed and comparative data about available measures to reduce or capture pollutants before they percolate into the site’s groundwater, escape into its drainage channels, or reach off-site streams.

Already, the county has chosen not to appeal the court’s judgment. In an upcoming supplemental EIR

impacts associated with storm water runoff, urban runoff and construction-related activities. In addition, they will have the opportunity to play an active role in the evaluation and selection of impact mitigations that will help improve water quality in Orange County.

We should note that while tough mitigations in this case alone will not clean up Orange County’s polluted coastal waters, the runoff polluting these waters stems from “a thousand points of non-point pollution,” and if each new project is to incorporate the strictest water quality impact mitigations, the incremental and cumulative benefit for water quality will be significant.

Frank P. Angel and Ed Grutzmacher of the Santa Monica-based Law Offices of Frank P. Angel (LOFPA) served as legal counsel for the CEQA plaintiff, RCCF. LOFPA specializes in representing environmental organizations and citizen groups in environmental, Coastal Act, and land use disputes before administrative decision makers and the courts.



Ray Chandos is a teacher of electronic technology at Irvine Valley College. He founded the Rural Canyons Conservation Fund in 1988 when the Orange County Board of Supervisors approved plans for a four-lane highway through rural Trabuco Canyon where he had hiked since he was a young boy.

Since that eye-opening experience, Ray has become his own teacher, learning how the judicial system works, discovering how land use decisions are made, and reading up on the latest CEQA decisions in the local law library.

CEQA continues to be an essential tool for the Fund. “Unless people know what’s going on and put up a fight, local government will be pressured by development interests to ignore the laws and policies that protect the environment. CEQA provides the alarm bell. Then, it’s up to us.”

Ray admits that it’s an uphill battle. “When people join the Rural Canyons Conservation Fund I joke that they’ll spend more time in law libraries and at public hearings than in the great outdoors. But it’s worth it. It’s the least I can do for my son and his generation.”

Attachment B

Chino Hills State Park – Orange County Parcels

085-071-32	322-041-11	329-021-02	329-042-03
085-071-36	322-041-20	329-031-01	329-042-04
085-071-38	322-041-22	329-031-02	329-042-05
085-071-39	322-041-23	329-031-04	329-042-06
085-071-43	322-041-24	329-032-01	329-042-07
085-071-44	322-051-01	329-032-02	329-042-08
308-011-11	322-051-06	329-032-03	329-042-09
308-011-19	322-051-07	329-032-04	329-042-10
308-011-21	322-051-09	329-032-05	329-042-11
308-021-16	322-051-11	329-032-06	329-042-12
308-021-18	322-051-12	329-032-07	329-042-13
308-021-20	322-221-07	329-032-08	329-042-14
308-031-16	322-221-08	329-032-09	329-042-15
312-011-10	326-011-03	329-032-10	329-042-16
312-011-17	326-011-04	329-032-11	329-042-17
312-011-18	326-011-07	329-032-12	329-042-18
312-011-19	326-021-07	329-032-13	329-042-19
312-041-01	326-021-08	329-032-14	329-042-20
312-041-08	326-021-10	329-032-15	329-042-21
312-051-03	326-021-12	329-032-16	329-042-22
312-051-04	326-021-16	329-032-17	329-042-23
312-051-05	326-021-18	329-032-18	329-042-24
315-011-01	326-021-20	329-032-19	329-042-25
315-011-16	326-021-27	329-041-01	329-042-26
315-011-17	326-031-04	329-041-02	329-042-27
315-013-08	326-031-05	329-041-03	329-042-28
315-013-10	326-031-16	329-041-04	329-042-29
315-013-11	326-031-17	329-041-07	329-052-25
315-081-05	326-031-18	329-041-08	353-061-03
315-081-06	326-031-19	329-041-09	353-061-04
315-081-08	326-031-20	329-041-10	353-063-14
322-031-25	326-031-21	329-041-11	353-063-30
322-031-27	329-011-06	329-041-12	353-063-31
322-031-28	329-011-07	329-042-01	
322-031-29	329-021-01	329-042-02	

1/29/2015

Bill Text - AB-52 Native Americans: California Environmental Quality Act.

Attachment C



California
LEGISLATIVE INFORMATION

AB-52 Native Americans: California Environmental Quality Act. (2013-2014)

Assembly Bill No. 52

CHAPTER 532

An act to amend Section 5097.94 of, and to add Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to, the Public Resources Code, relating to Native Americans.

[Approved by Governor September 25, 2014. Filed with Secretary of State September 25, 2014.]

LEGISLATIVE COUNSEL'S DIGEST

AB 52, Gatto. Native Americans: California Environmental Quality Act.

Existing law, the Native American Historic Resource Protection Act, establishes a misdemeanor for unlawfully and maliciously excavating upon, removing, destroying, injuring, or defacing a Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historic Resources.

The California Environmental Quality Act, referred to as CEQA, requires a lead agency, as defined, to prepare, or cause to be prepared, and certify the completion of, an environmental impact report on a project that it proposes to carry out or approve that may have a significant effect on the environment or to adopt a negative declaration if it finds that the project will not have that effect. CEQA also requires a lead agency to prepare a mitigated negative declaration for a project that may have a significant effect on the environment if revisions in the project would avoid or mitigate that effect and there is no substantial evidence that the project, as revised, would have a significant effect on the environment. CEQA requires the lead agency to provide a responsible agency with specified notice and opportunities to comment on a proposed project. CEQA requires the Office of Planning and Research to prepare and develop, and the Secretary of the Natural Resources Agency to certify and adopt, guidelines for the implementation of CEQA that include, among other things, criteria for public agencies to following in determining whether or not a proposed project may have a significant effect on the environment.

This bill would specify that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource, as defined, is a project that may have a significant effect on the environment. The bill would require a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the tribe requests consultation, prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The bill would specify examples of mitigation measures that may be considered to avoid or minimize impacts on tribal cultural resources. The bill would make the above provisions applicable to projects that have a notice of preparation or a notice of negative declaration filed or mitigated negative declaration on or after July 1, 2015. The bill would require the Office of Planning and Research to revise on or before July 1, 2016, the guidelines to separate the consideration of tribal cultural resources from that for paleontological resources and add consideration of tribal cultural resources. By requiring the lead agency to consider these effects relative to tribal cultural resources

http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52

1/8

1/29/2015

Bill Text - AB-52 Native Americans: California Environmental Quality Act.

and to conduct consultation with California Native American tribes, this bill would impose a state-mandated local program.

Existing law establishes the Native American Heritage Commission and vests the commission with specified powers and duties.

This bill would additionally require the commission to provide each California Native American tribe, as defined, on or before July 1, 2016, with a list of all public agencies that may be a lead agency within the geographic area in which the tribe is traditionally and culturally affiliated, the contact information of those agencies, and information on how the tribe may request those public agencies to notify the tribe of projects within the jurisdiction of those public agencies for the purposes of requesting consultation.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. (a) The Legislature finds and declares all of the following:

(1) Current state law provides a limited measure of protection for sites, features, places, objects, and landscapes with cultural value to California Native American tribes.

(2) Existing law provides limited protection for Native American sacred places, including, but not limited to, places of worship, religious or ceremonial sites, and sacred shrines.

(3) The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not readily or directly include California Native American tribes' knowledge and concerns. This has resulted in significant environmental impacts to tribal cultural resources and sacred places, including cumulative impacts, to the detriment of California Native American tribes and California's environment.

(4) As California Native Americans have used, and continue to use, natural settings in the conduct of religious observances, ceremonies, and cultural practices and beliefs, these resources reflect the tribes' continuing cultural ties to the land and their traditional heritages.

(5) Many of these archaeological, historical, cultural, and sacred sites are not located within the current boundaries of California Native American reservations and rancherias, and therefore are not covered by the protectionist policies of tribal governments.

(b) In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and respecting the interests and roles of project proponents, it is the intent of the Legislature, in enacting this act, to accomplish all of the following:

(1) Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.

(2) Establish a new category of resources in the California Environmental Quality Act called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.

(3) Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.

(4) Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because the California Environmental Quality Act calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.

http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52

2/8

1/29/2015

Bill Text - AB-52 Native Americans: California Environmental Quality Act.

(5) In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in the California Environmental Quality Act environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decisionmaking body of the lead agency.

(6) Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code).

(7) Ensure that local and tribal governments, public agencies, and project proponents have information available, early in the California Environmental Quality Act environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.

(8) Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.

(9) Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

SEC. 2. Section 5097.94 of the Public Resources Code is amended to read:

5097.94. The commission shall have the following powers and duties:

(a) To identify and catalog places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands. The identification and cataloging of known graves and cemeteries shall be completed on or before January 1, 1984. The commission shall notify landowners on whose property such graves and cemeteries are determined to exist, and shall identify the Native American group most likely descended from those Native Americans who may be interred on the property.

(b) To make recommendations relative to Native American sacred places that are located on private lands, are inaccessible to Native Americans, and have cultural significance to Native Americans for acquisition by the state or other public agencies for the purpose of facilitating or assuring access thereto by Native Americans.

(c) To make recommendations to the Legislature relative to procedures which will voluntarily encourage private property owners to preserve and protect sacred places in a natural state and to allow appropriate access to Native American religionists for ceremonial or spiritual activities.

(d) To appoint necessary clerical staff.

(e) To accept grants or donations, real or in kind, to carry out the purposes of this chapter.

(f) To make recommendations to the Director of Parks and Recreation and the California Arts Council relative to the California State Indian Museum and other Indian matters touched upon by department programs.

(g) To bring an action to prevent severe and irreparable damage to, or assure appropriate access for Native Americans to, a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, pursuant to Section 5097.97. If the court finds that severe and irreparable damage will occur or that appropriate access will be denied, and appropriate mitigation measures are not available, it shall issue an injunction, unless it finds, on clear and convincing evidence, that the public interest and necessity require otherwise. The Attorney General shall represent the commission and the state in litigation concerning affairs of the commission, unless the Attorney General has determined to represent the agency against whom the commission's action is directed, in which case the commission shall be authorized to employ other counsel. In any action to enforce the provisions of this subdivision the commission shall introduce evidence showing that such cemetery, place, site, or shrine has been historically regarded as a sacred or sanctified place by Native American people and represents a place of unique historical and cultural significance to an Indian tribe or community.

(h) To request and utilize the advice and service of all federal, state, local, and regional agencies.

http://eginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52

3/8

1/29/2015

Bill Text - AB-52 Native Americans: California Environmental Quality Act.

(i) To assist Native Americans in obtaining appropriate access to sacred places that are located on public lands for ceremonial or spiritual activities.

(j) To assist state agencies in any negotiations with agencies of the federal government for the protection of Native American sacred places that are located on federal lands.

(k) To mediate, upon application of either of the parties, disputes arising between landowners and known descendants relating to the treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

The agreements shall provide protection to Native American human burials and skeletal remains from vandalism and inadvertent destruction and provide for sensitive treatment and disposition of Native American burials, skeletal remains, and associated grave goods consistent with the planned use of, or the approved project on, the land.

(l) To assist interested landowners in developing agreements with appropriate Native American groups for treating or disposing, with appropriate dignity, of the human remains and any items associated with Native American burials.

(m) To provide each California Native American tribe, as defined in Section 21073, on or before July 1, 2016, with a list of all public agencies that may be a lead agency pursuant to Division 13 (commencing with Section 21000) within the geographic area with which the tribe is traditionally and culturally affiliated, the contact information of those public agencies, and information on how the tribe may request the public agency to notify the tribe of projects within the jurisdiction of those public agencies for the purposes of requesting consultation pursuant to Section 21080.3.1.

SEC. 3. Section 21073 is added to the Public Resources Code, to read:

21073. "California Native American tribe" means a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004.

SEC. 4. Section 21074 is added to the Public Resources Code, to read:

21074. (a) "Tribal cultural resources" are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

SEC. 5. Section 21080.3.1 is added to the Public Resources Code, to read:

21080.3.1. (a) The Legislature finds and declares that California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources.

(b) Prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, the lead agency shall begin consultation with a California Native American tribe that is

http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52

4/8

1/29/2015

Bill Text - AB-52 Native Americans: California Environmental Quality Act.

traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation. When responding to the lead agency, the California Native American tribe shall designate a lead contact person. If the California Native American tribe does not designate a lead contact person, or designates multiple lead contact people, the lead agency shall defer to the individual listed on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004. For purposes of this section and Section 21080.3.2, "consultation" shall have the same meaning as provided in Section 65352.4 of the Government Code.

(c) To expedite the requirements of this section, the Native American Heritage Commission shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated with the project area.

(d) Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

(e) The lead agency shall begin the consultation process within 30 days of receiving a California Native American tribe's request for consultation.

SEC. 6. Section 21080.3.2 is added to the Public Resources Code, to read:

21080.3.2. (a) As a part of the consultation pursuant to Section 21080.3.1, the parties may propose mitigation measures, including, but not limited to, those recommended in Section 21084.3, capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource. If the California Native American tribe requests consultation regarding alternatives to the project, recommended mitigation measures, or significant effects, the consultation shall include those topics. The consultation may include discussion concerning the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and, if necessary, project alternatives or the appropriate measures for preservation or mitigation that the California Native American tribe may recommended to the lead agency.

(b) The consultation shall be considered concluded when either of the following occurs:

(1) The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource.

(2) A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

(c) (1) This section does not limit the ability of a California Native American tribe or the public to submit information to the lead agency regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any appropriate measures to mitigate the impact.

(2) This section does not limit the ability of the lead agency or project proponent to incorporate changes and additions to the project as a result of the consultation, even if not legally required.

(d) If the project proponent or its consultants participate in the consultation, those parties shall respect the principles set forth in this section.

SEC. 7. Section 21082.3 is added to the Public Resources Code, to read:

21082.3. (a) Any mitigation measures agreed upon in the consultation conducted pursuant to Section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to paragraph (2) of subdivision (b), and shall be fully enforceable.

http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52

5/8

1/29/2015

Bill Text - AB-52 Native Americans: California Environmental Quality Act.

(b) If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- (1) Whether the proposed project has a significant impact on an identified tribal cultural resource.
- (2) Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.

(c) (1) Any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with subdivision (r) of Section 6254 of, and Section 6254.10 of, the Government Code, and subdivision (d) of Section 15120 of Title 14 of the California Code of Regulations, without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. This subdivision does not prohibit the confidential exchange of the submitted information between public agencies that have lawful jurisdiction over the preparation of the environmental document.

(2) (A) This subdivision does not prohibit the confidential exchange of information regarding tribal cultural resources submitted by a California Native American tribe during the consultation or environmental review process among the lead agency, the California Native American tribe, the project applicant, or the project applicant's agent. Except as provided in subparagraph (B) or unless the California Native American tribe providing the information consents, in writing, to public disclosure, the project applicant or the project applicant's legal advisers, using a reasonable degree of care, shall maintain the confidentiality of the information exchanged for the purposes of preventing looting, vandalism, or damage to a tribal cultural resources and shall not disclose to a third party confidential information regarding tribal cultural resources.

(B) This paragraph does not apply to data or information that are or become publicly available, are already in the lawful possession of the project applicant before the provision of the information by the California Native American tribe, are independently developed by the project applicant or the project applicant's agents, or are lawfully obtained by the project applicant from a third party that is not the lead agency, a California Native American tribe, or another public agency.

(3) This subdivision does not affect or alter the application of subdivision (r) of Section 6254 of the Government Code, Section 6254.10 of the Government Code, or subdivision (d) of Section 15120 of Title 14 of the California Code of Regulations.

(4) This subdivision does not prevent a lead agency or other public agency from describing the information in general terms in the environmental document so as to inform the public of the basis of the lead agency's or other public agency's decision without breaching the confidentiality required by this subdivision.

(d) In addition to other provisions of this division, the lead agency may certify an environmental impact report or adopt a mitigated negative declaration for a project with a significant impact on an identified tribal cultural resource only if one of the following occurs:

- (1) The consultation process between the California Native American tribe and the lead agency has occurred as provided in Sections 21080.3.1 and 21080.3.2 and concluded pursuant to subdivision (b) of Section 21080.3.2.
- (2) The California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage, in the consultation process.
- (3) The lead agency has complied with subdivision (d) of Section 21080.3.1 and the California Native American tribe has failed to request consultation within 30 days.

(e) If the mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of the consultation or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to subdivision (b) of Section 21084.3.

(f) Consistent with subdivision (c), the lead agency shall publish confidential information obtained from a

http://eginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52

6/8

1/29/2015

Bill Text - AB-52 Native Americans: California Environmental Quality Act.

California Native American tribe during the consultation process in a confidential appendix to the environmental document and shall include a general description of the information, as provided in paragraph (4) of subdivision (c) in the environmental document for public review during the public comment period provided pursuant to this division.

(g) This section is not intended, and may not be construed, to limit consultation between the state and tribal governments, existing confidentiality provisions, or the protection of religious exercise to the fullest extent permitted under state and federal law.

SEC. 8. Section 21083.09 is added to the Public Resources Code, to read:

21083.09. On or before July 1, 2016, the Office of Planning and Research shall prepare and develop, and the Secretary of the Natural Resources Agency shall certify and adopt, revisions to the guidelines that update Appendix G of Chapter 3 (commencing with Section 15000) of Division 6 of Title 4 of the California Code of Regulations to do both of the following:

(a) Separate the consideration of paleontological resources from tribal cultural resources and update the relevant sample questions.

(b) Add consideration of tribal cultural resources with relevant sample questions.

SEC. 9. Section 21084.2 is added to the Public Resources Code, to read:

21084.2. A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.

SEC. 10. Section 21084.3 is added to the Public Resources Code, to read:

21084.3. (a) Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.

(b) If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process provided in Section 21080.3.2, the following are examples of mitigation measures that, if feasible, may be considered to avoid or minimize the significant adverse impacts:

(1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

(2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

(A) Protecting the cultural character and integrity of the resource.

(B) Protecting the traditional use of the resource.

(C) Protecting the confidentiality of the resource.

(3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

(4) Protecting the resource.

SEC. 11. (a) This act does not alter or expand the applicability of the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) concerning projects occurring on Native American tribal reservations or rancherias.

(b) This act does not prohibit any California Native American tribe or individual from participating in the California Environmental Quality Act on any issue of concern as an interested California Native American tribe, person, citizen, or member of the public.

(c) This act shall apply only to a project that has a notice of preparation or a notice of negative declaration or

http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52

7/8

1/29/2015

Bill Text - AB-52 Native Americans: California Environmental Quality Act.

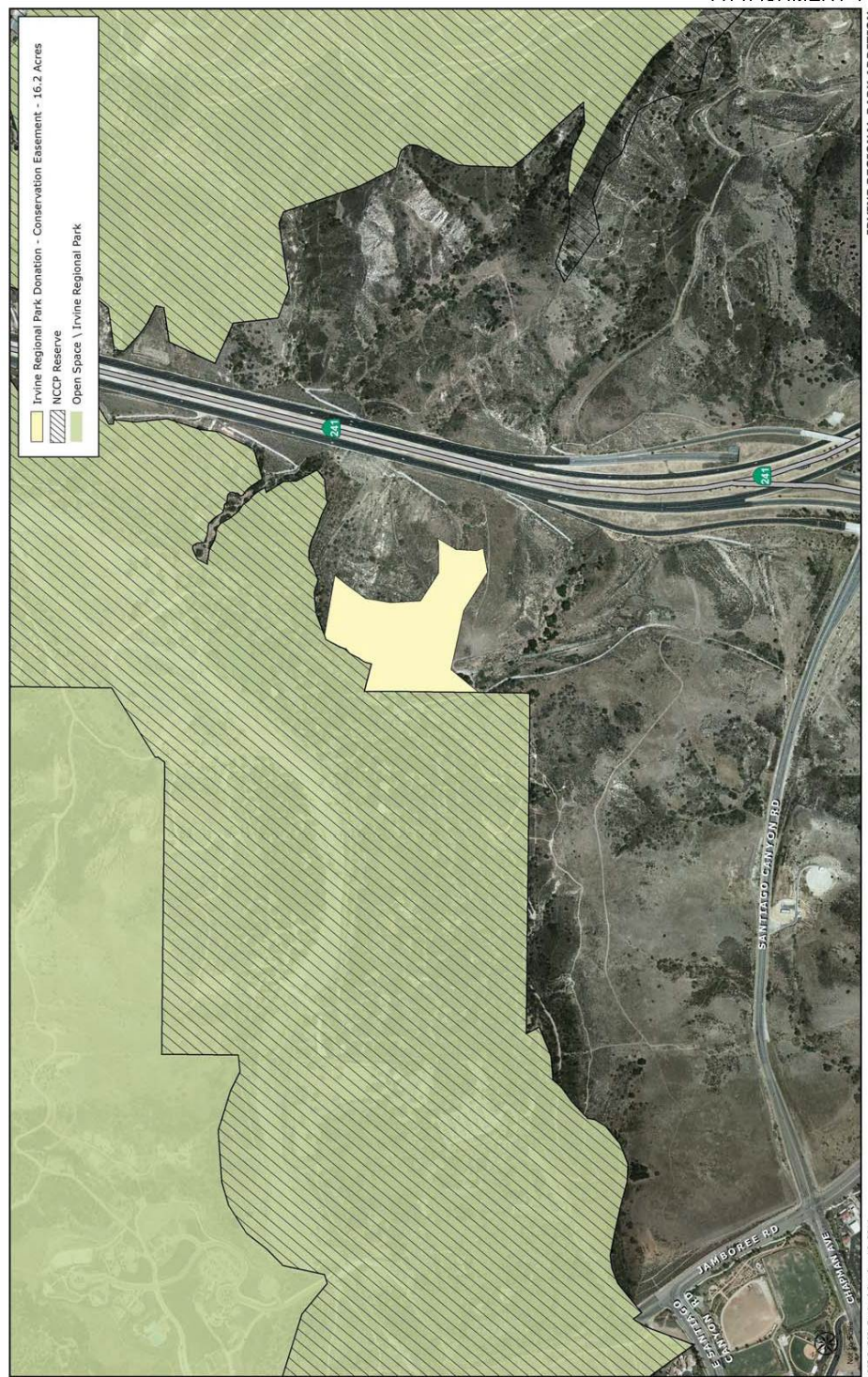
mitigated negative declaration filed on or after July 1, 2015.

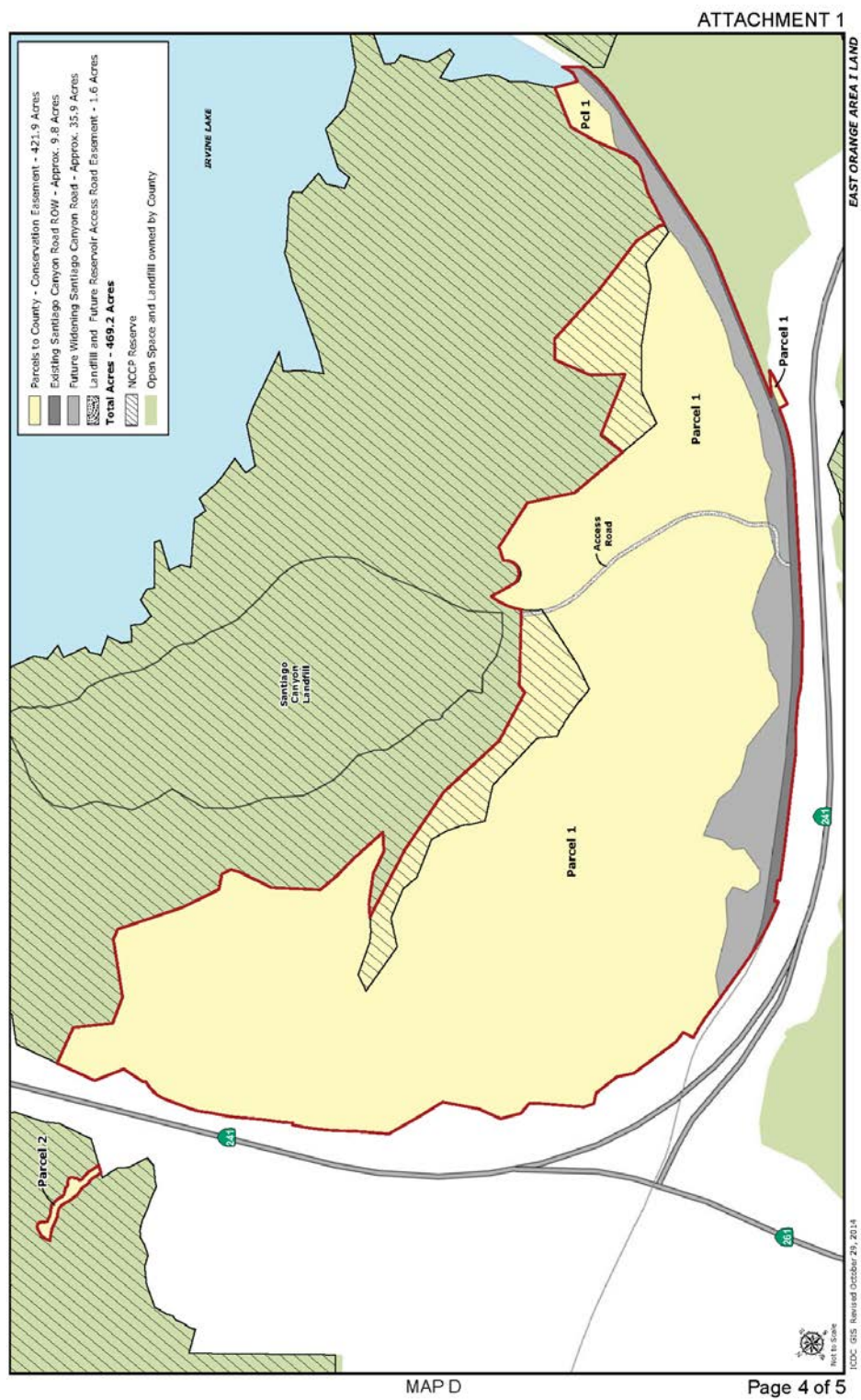
SEC. 12. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.

http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52

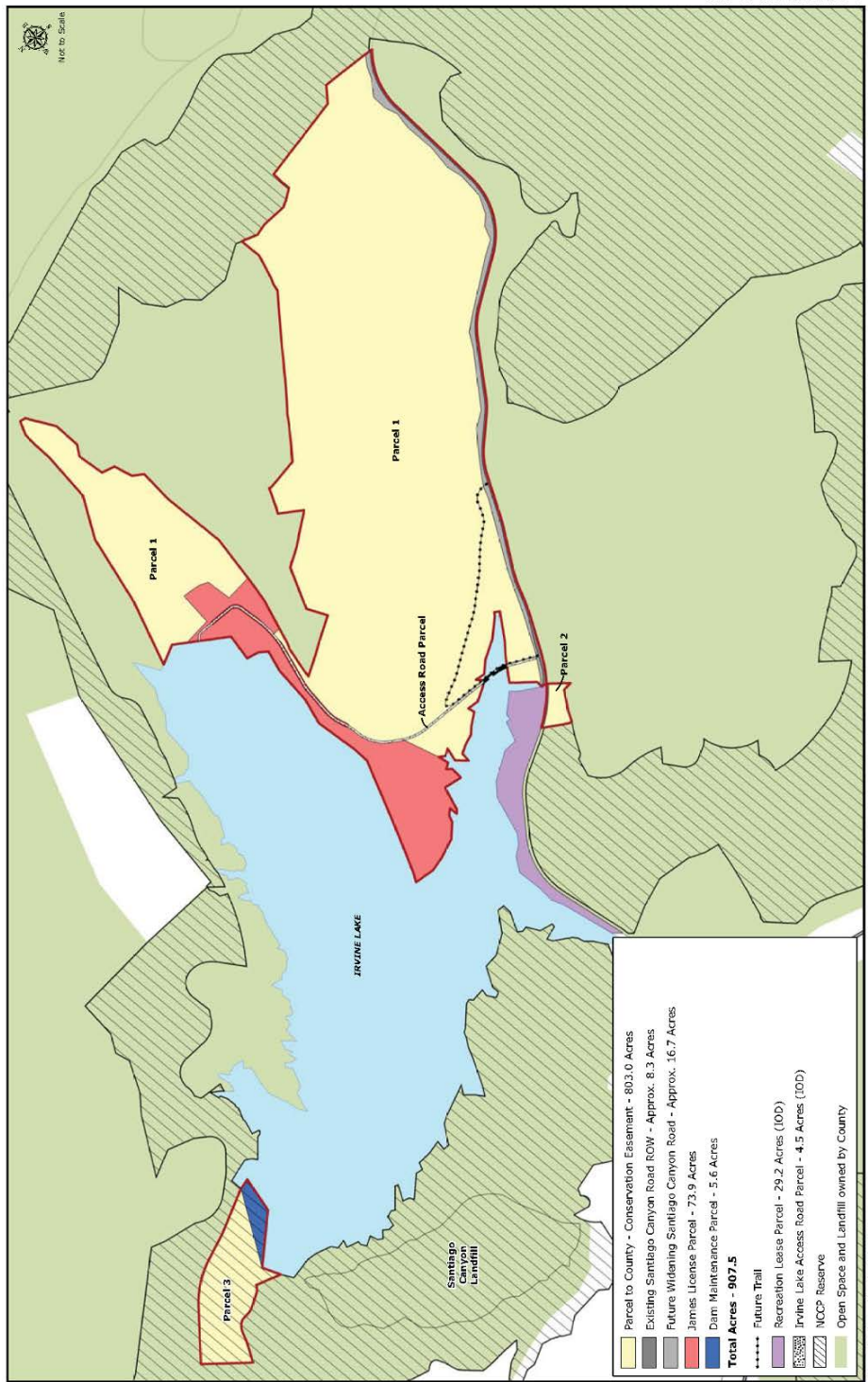
8/8

ATTACHMENT 1





ATTACHMENT 1





**Orange County (OC) Public Works Activity in Your Area:
Removal of Infected Trees along Live Oak Canyon Road**

Notification Date: 12/29/14

OC Public Works personnel will soon perform activities along Live Oak Canyon Road to remove nine (9) trees that are infected with a pest fungus. The type of tree infected and to be removed is the Coast Live Oak (*Quercus Agrifolia*).

Why is this work being performed?

After the discovery of a Coast Live Oak tree failure in the area, professionally certified arborists evaluated trees along Live Oak Canyon Road and identified trees that are affected by the pest *Polyphagous Shot Hole Borer* and *Fusarium* fungus, a beetle-transported disease that damages trees and shrubs. To protect other trees and surrounding vegetation, the nine infected trees will be removed.

OC Public Works is working with the certified arborists on the necessary procedures for removal of diseased trees so as not to affect other vegetation in the area. The certified arborists do not recommend replanting at any of the sites at this time.

Where will trees be removed?

A total of nine (9) trees will be removed in two separate areas (*please see map below*):

- Between Lambrose Canyon Road and Canyon Creek Drive (8 trees)
- Approximately 2,000 feet north of the Live Oak Canyon Rd / Trabuco Canyon Rd intersection (1 tree)

When will this work occur?

Crews expect to perform this work in **early January**. Note that this schedule may change due to weather or other factors.

Traffic Safety

We urge drivers, cyclists and pedestrians along Live Oak Canyon Road in the areas above to observe traffic safety signs and personnel during this work. Your safety, and the safety of crews performing work, is our top priority.

If you have questions or would like more information, please call OC Public Works at **(714) 955-0200**.



300 N. Flower Street, Santa Ana, CA 92703
P.O. Box 4048, Santa Ana, CA 92702-4048
714.667.8800



www.ocpublicworks.com
www.facebook.com/ocpublicworks
www.twitter.com/ocpublicworks

Attachment F



Polyphagous Shot Hole Borer + Fusarium Dieback A New Pest Complex in Southern California

BACKGROUND



The Polyphagous Shot Hole Borer (PSHB), *Euwallacea* sp., is an invasive beetle that carries two fungi: *Fusarium euwallaceae* and *Graphium* sp. The adult female (A) tunnels galleries into a wide variety of host trees, where it lays its eggs and grows the fungi. The fungi cause a disease called Fusarium Dieback (FD), which interrupts the transport of water and nutrients in over 110 tree species. Once the beetle/fungal complex has killed the host tree, pregnant females fly in search of a new host.

Photo credit: (A) Gevork Arakelian/LA County Dept of Agriculture

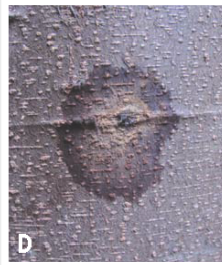
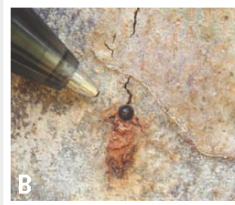
HOSTS

PSHB attacks hundreds of tree species, but it can only successfully lay its eggs and/or grow the fungi in certain hosts. These include: Box elder, California sycamore, London plane, Coast live oak, Avocado, White alder, Japanese maple, Liquidambar, and Red willow. Visit eskalenlab.ucr.edu for the full list.

EXTERNAL SIGNS + SYMPTOMS

Attack symptoms, a host tree's visible response to stress, vary among host species. Staining (C, D), sugary exudate (E), gumming (F, G), and/or frass (H) may be noticeable before the tiny beetles (females are typically 1.8-2.5 mm long). Beneath or near these symptoms, you may also see the beetle's entry/exit holes (B), which are ~0.85 mm in diameter. The abdomen of the female beetle can sometimes be seen sticking out of the hole.

Species pictured: C. California sycamore, D. White alder, E. Avocado, F. Titoki, G. Chinese flame tree, H. Red willow



INTERNAL SYMPTOMS

Fusarium euwallaceae causes brown to black discoloration in infected wood. Scraping away bark over the entry/exit hole reveals dark staining around the gallery (I), and cross sections of cut branches (J) show the extent of infection. Advanced infections eventually lead to branch dieback (K).



Authors: Monica Dimson (UCCE Orange); John Kabashima, Ph.D (UCCE Orange); and Akif Eskalen, Ph.D (UC Riverside). Images provided by authors unless cited otherwise. Printed 08/2014.



It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities. Complete nondiscrimination policy statement can be found at <http://ucan.edu/sites/anr/inst/187580.pdf>. Inquiries regarding ANR's nondiscrimination policies may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Agriculture and Natural Resources, 3801 Second Street, Davis, CA 95618, 19301.730.3118.



PSHB/FD LOOK-ALIKES

Look out for staining or bark damage caused by other wood-boring beetles and/or fungi, which can be mistaken for similar signs and symptoms of PSHB/FD.



Goldspotted oak borer, *Agrilus auroguttatus*
 Hosts: Coast live oak, canyon live oak, CA black oak
 Look for: D-shaped exit-holes (A) <4 mm wide but larger than those of PSHB, beetles ~10 mm long (B), bark staining (C), crown thinning, associated woodpecker damage



Western sycamore borer, *Synanthedon resplendens*
 Hosts: Species of sycamore, oak, and ceanothus
 Look for: whitish/pink larvae 25-38 mm long (D), roughened bark (E), reddish sawdust-like frass and/or pupal cases (F) in bark crevices or on ground, bleeding

Photo credit (A), (C) Tom Coleman/USDA. (B) Center for Invasive Species Research <cisr.ucr.edu>. (D), (G), (H), (I), (J) UC IPM <ipm.ucanr.edu>.



Oak ambrosia beetles, *Monarthrum dentiger*, *M. scutellare* (G)
 Hosts: Oak species, tanoak, CA buckeye
 Look for: slightly larger beetles (*M. scutellare*: 3.5-4.1 mm long, *M. dentiger*: 1.9-2.4 mm) and entry-holes (1-1.5 mm diameter) with bleeding, frothing, bubbling or white boring dust (H) that is tan when oxidized; often attack stressed trees



Foamy bark canker, *Geosmithia pallida* + Western oak bark beetle, *Pseudopityophthorus pubipennis*
 Hosts: Coast live oak
 Look for: beetles 1.7-2.3 mm long (I); smaller entry-holes than those of PSHB; reddish frass (J), reddish sap, wet discoloration, and/or foamy liquid from entry-hole (K); dead tissue around entry hole, beneath bark (L)

.COM

Stay up-to-date on the latest PSHB research at Eskalen Lab (<http://eskalenlab.ucr.edu>) or the UC Riverside Center for Invasive Species Research (<http://cisr.ucr.edu>)

HOW TO REPORT A SUSPECT TREE

Please report suspected tree infestations in Orange County to pshb.uccce@gmail.com. Report trees outside of Orange County to UC Riverside at eskalenlab@gmail.com. Submit the following information:

- Your contact information (name, city, phone number, email)
- Suspect tree species
- Description of suspect tree's location (and/or GPS coordinates)
- Description of suspect tree's symptoms
- Photos of suspect tree and close-up photos of symptoms (see examples)

Based on the symptom description and photos, UC Riverside or UCCE Orange will decide whether a field assessment is warranted.



Take photos of suspect trees from several distances. Include photos of:

1. the trunk or symptomatic branches
2. the symptoms (close-up)
3. the entry/exit hole, if visible, with a ballpoint pen for scale (remove gumming or exudate if necessary)

If dieback is observed, include a picture of the entire tree.

Printed 07/2014



It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities. Complete nondiscrimination policy statement can be found at <http://ucan.edu/sites/anr/files/137590.pdf>. Inquiries regarding ANR's nondiscrimination policies may be directed to Linda Marie Martin, Affirmative Action Contact, University of California, Agriculture and Natural Resources, 2001 Second Street, Davis, CA 95616, (530) 750-1210.

FUNDED BY



APPENDIX E: Glossary

Climate Change – Any long-term significant change in the “average weather” that a given region experiences. Average weather may include average temperature, precipitation and wind patterns.

(<http://frap.cdf.ca.gov/assessment2010/definitions.html>)

Communities at Risk – Defined by the Healthy Forest Restoration Act of 2003 as - “Wildland Urban Interface Communities within the vicinity of federal lands that are at high risk from wildfire.” CAL FIRE expanded on this definition for California including all communities (regardless of distance from federal lands) for which a significant threat to human life or property exists as a result of a wildland fire event. California uses the following three factors to determine at risk communities: 1) high fuel hazard, 2) probability of a fire, and 3) proximity of intermingled wildland fuels and urban environments that are near fire threats.

Community Wildfire Protection Plan (CWPP) – A community based collaborative plan developed by local stakeholders that identifies and prioritizes areas for hazardous fuel reduction treatments to protect communities and infrastructure from wildfire. Stakeholders, applicable local government, local fire departments, state forestry, and federal land management agencies agree to the plans.

Cooperative Fire Protection Agreements – Agreements established between federal, state, tribal and local government entities to provide long term fire and emergency service protection.

Defensible Space – The area within the perimeter of a parcel, development, neighborhood or community where basic wildland fire protection practices and measures are implemented, providing the key point of defense from an approaching wildfire or defense against encroaching wildfires or escaping structure fires.

(http://cdfdata.fire.ca.gov/fire_er/fpp_engineering_view?guide_id=8)

Fire Hazard – A fuel complex, defined by volume, type condition, arrangement, and location, that determines the degree of ease of ignition and of resistance to control.

(<http://www.nwcg.gov/pms/pubs/glossary>)

Fire Prevention – Activities such as public education, community outreach, building code enforcement, engineering (construction standards), and reduction of fuel hazards that is intended to reduce the incidence of unwanted human-caused wildfires and the risks they pose to life, property or resources. (<http://www.nwcg.gov/pms/pubs/glossary>)

Fire Resilient – The ability of a vegetation type, ecosystem, or community to respond positively to or recover quickly from the effects of a wildfire burning within, across or adjacent to them.

Fire Resistant – The condition of an asset that resists ignition and damage from wildfire. Structures are built using ignition resistant materials such as stucco, tile roofs, and boxed eaves with the likelihood that they will withstand most wildland fires or at least reduce damage caused by them.

Fire Risk – The chance of fire starting, as determined by the presence and activity of causative agents; a causative agent or a number related to the potential number of firebrands (embers) to which a given area will be exposed during the day.
(<http://www.nwcg.gov/pms/pubs/glossary>)

Fire Safe Building Standards – Various laws and codes that apply accepted fire safety practices (as determined by scientific research panels and associations, with replicated results) into construction of assets. Examples of laws and codes include; California Fire Code Chapter 49, California Building Code Chapter 7A, Public Resource Code, §4290 and Fire Safe Regulations, §1270.

Fire Safe Councils (FSC) – A group of concerned citizens organized to educate groups on fire safe programs, projects and planning. The Councils work closely with the local fire agencies to develop and implement priorities.
(<http://www.firesafecouncil.org>)

Fireshed – A contiguous area displaying similar fire history and problem fire characteristics (i.e., intensity, resistance to control) and requiring similar suppression response strategies.

Fire Suppression Resources – State, federal, tribal, local and private, equipment and resources, gathered to extinguish and mitigate wildland fires.

FIREWISE – A national program designed to reach beyond the fire service by involving homeowners, community leaders, planners, developers, and others in the effort to protect people, property, and natural resources from the risk of wildland fire before a fire starts. The Firewise program is community driven.

Fire Hazard Severity Zones – Areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, then define the application of various mitigation strategies to reduce risk associated with wildland fires.

Forest and Rangeland Health – An expression of the prevalent ecological conditions on a landscape as compared to benchmark conditions yielding maximum benefit to multiple resource values - ecological, economic, and social/political.

Fuels Treatment – The manipulation or removal of fuels to reduce the likelihood of igniting and to reduce fire intensity (e.g., lopping, chipping, crushing, piling and burning).

Fuels Reduction Projects – The modification of vegetation in order to reduce potential fire threat. These projects often result in improved wildlife habitat capability, timber growth, and/or forage production.

GIS – Geographic Information Systems is a configuration of computer hardware and software that stores, displays, and analyzes geographic data spatially or through attribute features.

Hand Crews – A number of individuals organized, trained and supervised principally for fire suppression or fuel reduction projects.

Ignition Density – The number of fire ignitions that occur in a specific unit of area, over a specified period of time; often used as a measure of initial attack workload.

Initial Attack – A planned response to a wildfire given the wildfire's potential fire behavior. The objective of initial attack is to stop the fire and put it out in a manner consistent with firefighter and public safety and values to be protected.
(<http://www.nwcg.gov/pms/pubs/glossary>)

Land Use Planning – A comprehensive assessment leading to a set of decisions that guide use of land within an identified area.

Mutual Aid – An agreement in which two or more parties agree to furnish resources and facilities and to render services to each and every other party of the agreement to prevent and combat any type of disaster or emergency.

Native Species Seed Bank – A storage area for seed that is collected from a species which is a part of the original vegetation of the area in question.

Prescribed Fire – A planned wildland fire designed to meet specific management objectives.

Reforestation –The establishment of forests on land that had recent (less than 10 years) tree cover. (<http://frap.cdf.ca.gov/assessment2010/definitions.html>)

Salvage – The harvesting of dead, dying and damaged trees to recover their economic values that would otherwise be lost to deterioration.

Situational Awareness –The application of the human senses to current and predicted weather, fire or other emergency conditions to plan and execute actions that provide for the safety of all personnel and equipment engaged in an emergency; includes development of alternative strategies of fire suppression and the net effect of each.

Total Force – Bringing to bear the application of the totality of the CAL FIRE employee team who provide all functional service aspects of the Department that enables it to effectively mitigate emergencies and protect resources in areas protected by CAL FIRE.

Type Conversion – The replacement of native vegetation (e.g., from native chaparral to non-native grassland) with non-native vegetation or the maintenance of an ecosystem in a pioneer state which prohibits the maturing of the native vegetation.

Unit Fire Plan – Plans developed by individual CAL FIRE Units to address wildfire protection areas, initial attack success, assets and infrastructure at risk, pre-fire management strategies, and accountability within their geographical boundaries.

Values and Assets at Risk – Accepted principals or standards, and any constructed or landscape attribute that has value and contributes to community or individual well-being and quality of life. Examples include property, structures, physical improvements, natural and cultural resources, community infrastructure, commercial standing timber, ecosystem health and production of water.

Wildland – Those unincorporated areas covered wholly or in part by trees, brush, grass, or other flammable vegetation.

Wildfire – An unplanned ignition; unwanted wildland fire including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.

Wildland Fire – Fire that occurs in the wildland as the result of an unplanned ignition.

Wildland Urban Interface (WUI) – The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. (<http://www.nwcg.gov/pms/pubs/glossary>)

Response to Comment Letter 12: Environmental Coalition – 2/4/15

Comment 12-1 Response

Comment: The commenter provides a summary of the project background and conveys their support for the NCCP/HCP process and Alternative 2.

Response: Thank you for your comments. The participation of the commenter in the public review of this document is appreciated. The commenter's support for Alternative 2 (the Proposed Plan) has been noted for the record. No changes to the Plan or Final EIR/EIS are warranted as a result of this comment.

Comment 12-2 Response

Comment: The comment requests that the text on page ES-2 be updated to clarify that OCTA updates its LRTP every four years and three LRTPs have been published/adopted since the Renewed Measure M passed in 2006. The commenter would also like the text to clarify that the LRTP being referenced in this section of the EIR/EIS is from 2006.

Response: The text on page ES-2 of the Final EIR/EIS has been edited to clarify that the Long Range Transportation Plan EIR that is incorporated by reference in the M2 NCCP/HCP EIR/EIS is the 2006 document. OCTA has developed subsequent LRTP documents since the 2006 version, however it was determined that these subsequent versions of the OCTA LRTP documents did not require environmental review. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-3 Response

Comment: The comment states that it is important to identify that OCTA intends to fulfill its commitment to the Renewed Measure M Ordinance #3 which states that at least five percent of the net revenues allocated for freeway projects shall be available for purposes of programmatic mitigation. Additionally, the comment states that ongoing Committee, Board, and stakeholder engagement will be essential to determining mitigation for the Army Corps and Regional Board permits and beyond the freeway projects, specific implementation measures to complete the program Ordinance's commitment.

Response: Comment noted. The discussion in Section 1.1.1, "Overview of the Proposed NCCP/HCP", of the Final EIR/EIS has been revised to provide clarification that the Proposed NCCP/HCP is a component of how OCTA is fulfilling its commitment to the Renewed Measure M Ordinance to use a portion of the freeway revenues for purposes of programmatic mitigation. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-4 Response

Comment: The first part of this comment states that the color green identifying the natural lands on Figure 1-2 is difficult to make out, and that two properties (Cielo Vista and Esperanza Hills) appear to have been left out of the Natural Lands designation.

The second part of the comment states that the color green identifying the natural lands on Figure 1-3 is difficult to make out, and recommends the removal of the vegetation/land cover information for areas outside of the Regional Conservation Areas.

Response: To improve readability, Figure 1-2 and all other figures in the EIR/EIS that show natural vegetation layers, have been updated to use a different shade of green to represent areas of natural lands. Since these figures were developed using regional vegetation data (see Section 2.4.1, “Natural Communities”, of the Plan for a description of the data sources used to map natural communities / land cover within the Plan Area), there may be instances where site specific information is not up to date. It should be noted that for areas around the covered freeway improvement projects and the OCTA-acquired Preserves, more detailed vegetation mapping and/or aerial photo review was completed to have more accurate and up-to-date vegetation/land cover data when evaluating the individual components of the Proposed Plan. Figure 1-3 has been modified to remove the vegetation/land cover information for areas outside of the Regional Conservation Areas. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-5 Response

Comment: The commenter states that the Environmental Coalition does not support grazing or prescribed burns on the Preserves as described on page 2-10 of the Draft EIR/EIS. The commenter also has concerns on other vegetation treatments (mastication, grazing, mechanical thinning, removal, herbicide, etc.) as tools for fire risk reduction or ecosystem health. The commenter questions why OCTA has worked with interim land managers to remove cattle grazing and/or prevent it on the existing Preserves but yet proposes it for vegetation management in the Draft EIR/EIS. The commenter states that there needs to be additional research into the benefits and potential impacts of grazing as compared with other vegetation management options.

Response: Comment noted. The discussion under “Management Activities” on page 2-10 of the Final EIR/EIS has been revised and all references to grazing and prescribed burning as methods for large-scale vegetation management has been removed. Given the size and location of the OCTA Preserves, these methods are no longer considered appropriate management options for large-scale vegetation management. However, grazing is an option that may be considered for smaller defined areas. For example, goats have been historically utilized on the Aliso Canyon property to assist with fire/fuel management in partnership with a biological monitor to ensure that sensitive resources are not negatively impacted. This is an option that would still be evaluated for the continuing management of this Preserve. Specific vegetation mapping techniques for each individual Preserve will be considered and evaluated as part of the development of the Preserve specific RMPs. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-6 Response

Comment: The commenter requests that the discussion on page 2-17 of the EIR/EIS outline the efforts underway by the Finance Ad-Hoc Working Group and that the Environmental Oversight Committee (EOC) will be considering the Guiding Principles developed by the Ad-Hoc Working Group and will be presented with the suite options for allocating future revenues.

Response: Comment noted. The EOC is responsible for overseeing the allocation of funds for spending the M2 EMP revenues. Efforts to determine how funds are used outside of the Proposed

Plan are discussions that will involve the EOC and Finance Ad-Hoc Working Group. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-7 Response

Comment: The commenter states that the Hillside Development Policy for the City of Brea discussed on page 3.9-1 of the Draft EIR/EIS was codified in Brea's zoning ordinance and the text should be updated.

Response: Comment noted. The text on page 3.9-2 of the Final EIR/EIS under the "City of Brea General Plan and Amendment" discussion has been revised. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-8 Response

Comment: The commenter states that the acreage of Chino Hills State Park within the Plan Area (and Orange County) is incorrect and should be updated to approximately 6,994 acres on page 3.9-6 of the Draft EIR/EIS.

Response: Comment noted. The text on page 3.9-6 of the Final EIR/EIS under the "Chino Hills State Park" discussion has been updated. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-9 Response

Comment: The commenter states that following The Irvine Company's significant contributions to the natural lands repository, the Company can no longer be described as a major landowner in terms of acres of privately held conservation lands, and that they should be removed from the list of "significant private conservation areas" on page 3.9-7 of the Draft EIR/EIS as its conserved lands have already been incorporated under other categories. The commenter also states that this same comment applies to the Chapter 4 Introduction on Draft EIR/EIS page 4.1-4.

Response: Comment noted. The Irvine Company has been removed from the discussion of Private Conservation Areas on page 3.9-7 of the Final EIR/EIS. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-10 Response

Comment: The commenter states that The Wildlands Conservancy (TWC) also owns Irvine Mesa and Black Star Canyon, two other conservation areas in private ownership. These parcels should be discussed on pages 3.9-8 and 4.1-4 of the EIR/EIS.

Response: The Section 2.9.2.3 of the EIR/EIS describing the TWC has been updated with the following information from the TWC website: "The Wildlands Conservancy's 897-acre Mariposa Reserve is located in the Plan Area on Black Star Canyon Road, five miles north of Santiago Canyon Road in the foothills of Orange County. The Wildland Conservancy owns and manages this property as a habitat reserve surrounded by the Cleveland National Forest. Important habitats include: coastal sage scrub, valley needlegrass, sycamore riparian woodland, coast live oak riparian forests, rock cliffs and outcroppings, and chaparral. The reserve is important to many imperiled birds and is

often traveled by two radio-collared mountain lions. There are abundant displays of spring wildflowers dominated by Mariposa Lilies.’

Comment 12-11 Response

Comment: The commenter states that The Irvine Company’s recent donation of 2,493 acres has not been included in the OC Parks acreage, and that the acreage listed on page 3.9-8 of the Draft EIR/EIS should be adjusted by 2,493 acres to account for this recent change of ownership and addition to the network of conserved lands.

Response: Comment noted. The discussion of Orange County Parks on page 3.9-8 of the Final EIR/EIS has been updated. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-12 Response

Comment: The commenter disagrees with the statement under Impact BIO-9 on page 4.4-12 of the Draft EIR/EIS where it is stated:

“In all cases, covered freeway improvement projects would be designed to improve existing freeway infrastructure, and, therefore, wildlife movement and habitat connectivity/fragmentation effects have already occurred within original construction of these roadways. For the most part, the covered freeway improvement projects occur within urbanized areas where habitat connectivity is not an issue.”

The commenter states that this language does not take into consideration additional impacts to wildlife corridors and corridor usage as freeway capacity is expanded through construction of additional lanes. The commenter suggests modifying the language in Impact BIO-9 to acknowledge the impacts additional lanes can have to existing wildlife corridors including corridor length, openness ratio, lighting, and natural vegetation/cover.

Response: Comment noted. The discussion under Impact BIO-9 has been clarified in the Final EIR/EIS to describe effects associated with existing wildlife corridors to be consistent with how these effects are described in the Plan, which recognizes that if there is an existing wildlife corridor , then there is the potential for a freeway improvement project to affect it. As roadways are improved, OCTA will ensure the crossings will be maintained and improved according to the Wildlife Crossing Policy (see Section 5.6.2.3 of the Plan). No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-13 Response

Comment: The commenter suggests the definition of programmatic mitigation should be clarified in Table 4.4-6 to state that funds from the individual freeway program’s budget, not the EMP, should be used to maintain continued function of wildlife passages.

Response: Comment noted. The Plan specifies that any costs associated with implementation of avoidance and minimization measures, as described in Section 5.6, “Avoidance and Minimization”, of the Plan, will be funded through the individual construction budgets and will not rely on funding under the M2 Environmental Mitigation Program. The mitigation referred to in Table 4.4-6 is related to the avoidance and minimization measures required under the Wildlife Crossing Policy. These

mitigation measures will also be funded through the individual construction budgets. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-14 Response

Comment: The commenter states that Section 4.5.1, “Methodology and Significance Criteria”, of the EIR/EIS should be updated to include and discuss the passage of AB 52.

Response: Comment noted. To clarify, per Section 11 (c) of AB-52, only Notices of Preparation (NOPs) and draft EIRs released after July 1, 2015 must comply with AB-52. The NOP was released prior to July 1, 2015. Therefore, this document is not required to demonstrate compliance with AB-52. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-15 Response

Comment: The commenter requests that the descriptions of the programmatic mitigation measures in the 2006 LRTP Program EIR be updated to reflect that archaeological data recovery excavations do not constitute mitigation for impacts to tribal cultural resources.

Response: Comment noted. The resource type “Tribal Cultural Resource” was established in Section 1 (b) (2) of AB-52. As indicated above, the NOP was released prior to the date that AB-52 applies. Therefore, tribal cultural resources were not considered. Project level analysis for each individual freeway project will occur and will be required to comply with AB-52. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-16 Response

Comment: The commenter requests that Mitigation Measures MM CR-2 through MM CR-4 and MM CR-7 of EIR/EIS be revised to state that archaeological data recovery excavations do not mitigate for the loss of tribal cultural resources.

Response: Comment noted. Per Section 11 (c) of AB-52, only NOPs and draft EIRs released after July 1, 2015 must comply with AB-52. The NOP was released prior to July 1, 2015. Therefore, this document is not required to demonstrate compliance with AB-52. Project level analysis for each individual freeway project will occur and will be required to comply with AB-52. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-17 Response

Comment: The commenter suggests revising the text under Impact LU-7 on page 4.9-4 to clarify that the aim of the mitigation measure is to preserve natural lands.

Response: Comment noted. The discussion under Impact LU-7 has been revised in the Final EIR/EIS to clarify that the focus of mitigation will be on preservation of natural lands and restoration of existing disturbed habitats. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-18 Response

Comment: This comment is focused on the Plan and requests the same changes from Comment 12-13 on the EIR/EIS be made in the Plan.

Response: Comment noted. See Response to Comment 12-13.

Comment 12-19 Response

Comment: The commenter is pleased to see the California Native Plant Society's special status ranking included in Table 1-1 of the Plan.

Response: Comment noted.

Comment 12-20 Response

Comment: The commenter suggests specific adjustments to Figures 2-4 and 2-5 of the Plan. The commenter also states that the shade of green of Figures 2-4 and 2-5 of the Plan is difficult to make out and should be revised. Also, the commenter requests that Figure 2-5 be updated to reflect that the Irvine Ranch Open Space is now owned by OC Parks and should be shaded yellow.

Response: Comment noted. The protected lands layer is based on regional information; and a number of these changes have been made to the protected lands layer in Figures 2-4 and 2-5 of the Plan if they were near or adjacent to the OCTA acquired Preserves. However, some of the revisions requested in this comment for other areas of the County were not addressed because mapping is shown at a regional scale and not on a parcel-by-parcel inventory of protected lands. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-21 Response

Comment: This comment is focused on the Plan and requests the same changes from Comment 12-11 on the EIR/EIS be made in the Plan.

Response: Comment noted. See Response to Comment 12-11. Section 2.3.2.8 of the Plan has been revised. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-22 Response

Comment: This comment states that the Plan should be consistent with the EIR/EIS in stating there is a cap on the acres of natural habitat that can be permanently disturbed within the combined set of OCTA acquired Preserves.

Response: The Plan includes a discussion of the cap on impacts within the Preserves in Section 4.2.2, "Covered Activities within Preserves". This section is referenced within Section 3.1.2, "Covered Activities within the NCCP/HCP Preserves". The cap in the Final Plan has been adjusted from 11 to 13 acres to account for the addition of the Aliso Canyon and McPherson Preserves. No changes to the Plan are required as a result of this comment.

Comment 12-23 Response

Comment: This comment is focused on the Plan and requests the same changes from Comment 12-5 on the EIR/EIS be made in the Plan.

Response: Comment noted. See Response to Comment 12-5. Chapter 7 of the Plan has been revised to remove reference to grazing and prescribed burns within the OCTA acquired Preserves. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-24 Response

Comment: This comment is focused on the Plan and requests the same changes from Comment 12-12 on the EIR/EIS be made in the Plan.

Response: Comment noted. See Response to Comment 12-12.

Comment 12-25 Response

Comment: The commenter suggests including a new figure showing the effects on natural communities as outlined in Table 4-5 of the Plan, similar to the species specific figures in Chapter 4 of the Plan.

Response: Comment noted. A new figure in the Final Plan (Figure 4-3) has been created showing natural communities and covered freeway improvement projects, similar to the species specific figures in this chapter. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-26 Response

Comment: The commenter requests that the discussion in Section 5.4.1, "Selection of Preserves", in the Plan be revised to clarify that proposals for property acquisition were submitted from the public, non-profits, local agencies, and willing seller landowners.

Response: Comment noted. Section 5.4.1, "Selection of Preserves", in the Plan has been edited to reflect this comment. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-27 Response

Comment: The commenter notes that the Carbon Canyon Specific Plan mentioned on page 5-19 of the Plan was superseded when the City of Brea's 2003 General Plan was adopted. The commenter also states that the Chino Hill's State Park acreage should be updated to 14,102 acres.

Response: Comment noted. The description of the Hayashi Preserve in Section 5.4.2. "Preserves" has been edited to reflect this comment. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-28 Response

Comment: The commenter suggests the Plan contain parallel construction between the acquisition and restoration project selection sections.

Response: The Plan includes a copy of the evaluation criteria that was used to rank the candidate lands OCTA was considering for acquisition (see Appendix D of the Plan). More details of the individual ranking and selection were not included in the Plan due to the voluntary nature of land acquisition and negotiations. Additional language has been added to the Plan pertaining to the acquisition process. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-29 Response

Comment: This comment is focused on the Plan and requests the same Figure edits from Comment 12-20 be made on Figures 6-3, 6-5, 6-6, and 6-7 in the Plan.

Response: Comment noted. See Response to Comment 12-20. Figures 6-3, 6-5, 6-6, and 6-7 of the Plan have been modified. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-30 Response

Comment: The commenter suggests modifying the text in Section 6.4.7 of the Plan, “Western Pond Turtle”, to added that post Freeway Complex Fire numerous agencies and non-profits partnered to remove the non-native species *Arundo donax* from Carbon Creek thereby expanding aestivation and nesting habitat adjacent to the Hayashi property.

Response: Comment noted. Section 6.4.7 of the Plan, “Western Pond Turtle”, has been edited to reflect this comment. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-31 Response

Comment: The commenter states that some verified observations of mountain lions have occurred in Olinda Village nearby to the Hayashi property within the past three years as reported to the California Department of Parks and Recreation. The commenter also suggests the same comments from Comment 12-12 on the EIR/EIS be applied to Species Objective 13.4 on page 6-88 of the Plan.

Response: Comment noted. Section 6.4.13 of the Plan, “Mountain Lion”, has been edited to reflect this comment. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-32 Response

Comment: The commenter expresses support for the concept of using an adaptive management approach for the wildlife fencing described on page 7-11 of the Plan.

Response: Comment noted. Thank you for the comment. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-33 Response

Comment: The commenter looks forward to reviewing the individual resource management plans (RMPs) for each of the Preserves, and would like to ensure that they discuss how land managers will manage the creation of unauthorized trails.

Response: Comment noted. See the Master Response B within the Trails/Public section of these response to comments for a description of the Guiding Principles OCTA will follow for designated authorized trails within the RMPs for each Preserve. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-34 Response

Comment: The commenter suggests editing the text on page 7-13 of the Plan to call out that trail creation and/or expansion will be prohibited by OCTA.

Response: Comment noted. Please see the Master Responses A and B within the Trails/Public section of these response to comments for a more detailed description of how trails and public access will be addressed in the RMPs for each Preserve. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-35 Response

Comment: The comments suggests adding additional detail under the second bullet under Public Access on page 7-13 of the Plan to outline some of the sensitive resources that could be impacted from a public access standpoint, for example, riparian areas. Signage would be essential to ensuring proper and appropriate trail use and should be included here and in the RMPs.

Response: Comment noted. Page 7-13 of the Plan has been updated with these recommendations. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-36 Response

Comment: The commenter suggests adding additional detail under the second bullet on page 7-15 of the Plan to include signage to demarcate both authorized and unauthorized trails on the OCTA Preserves.

Response: Comment noted. Page 7-15 of the Plan has been updated with these recommendations. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-37 Response

Comment: The commenter suggests specifically calling out hiking under Passive Uses or Day Use of the Preserves on page 7-16 of the Plan. Currently, the Plan does not explicitly outline this use.

Response: Comment noted. Page 7-16 of the Plan has been updated with these recommendations. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-38 Response

Comment: The commenter suggests including speed limits for the mountain biking community and post appropriate signage to this end under the Mountain Biking discussion on page 7-16 of the Plan.

Response: Comment noted. Specific aspects of how trails will be used and implemented will be defined within the RMPs. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-39 Response

Comment: The commenter suggests OCTA consider stronger penalties for repeat offenders, such as incrementally increased ticketing fines and possible banning from use of the Preserve.

Response: Comment noted. Please see the Master Response B within the Trails/Public section of these response to comments for a more detailed description of how enforcement of trail use will be applied. The following bullets address enforcement:

- Enforcement of public access rules and policies is progressive and the focus will be on education of the various user groups and/or diversion of the activity to more suitable locations, rather than punishment.
- Repeated violation of access rules and policies and/or evidence of damage or harm to the Preserves may result in 1) fines significant enough to force change in behavior or 2) restricted public access/closures until resource protection can be assured. Fines may vary and, depending on the type and severity of the impact, could result in a per acre cost to restore and offset damage to a Preserve. The Preserve Manager should have the capacity to actively cite repeat violators and pursue damage reimbursements.

No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-40 Response

Comment: The commenter suggests the discussion under Conservation Strategy on Page 7-84 of the Draft Plan include parallel construction between the acquisition and restoration sections and that a similar sentence included under the acquisition section should outline that there are remaining funds available from previous rounds of acquisition, as seen in the restoration section.

Response: Comment noted. The Plan has been updated reflect the acquisition of the Aliso Canyon and MacPherson Preserves. The Conservation Strategy does not include the requirement or expectation of future Preserve acquisitions. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-41 Response

Comment: The commenter suggests adaptive management for other pests including the Goldspotted Oak Borer, Polyphagous Shot Hole Borer, Oak Ambrosia Beetle, and Fusarium Dieback Fungus, which have been identified in Weir and Trabuco Canyons, be considered for discussion under Potential Adaptive Management Issues at Preserves on page 7-84 of the Plan and included on the pest list.

Response: Comment noted. Invasive pests and other nonnative (exotic) species are identified as an adaptive management objective to be addressed. The Plan has been updated in the “Natural Communities” discussion within Section 7.2.8, “Summary of Adaptive Management Actions for Conserved Resources” to include the specific examples of the exotic pests’ currently threatening natural communities in the Plan Area. These types of adaptive management issues will be addressed in detail within the individual RMPs. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-42 Response

Comment: The commenter suggests additional agencies and organizations that OCTA can coordinate with in respect to the adaptive management objective at the top of page 7-86 of the Plan.

Response: Comment noted. The text within the “Natural Communities” discussion within Section 7.2.8, “Summary of Adaptive Management Actions for Conserved Resources” of the Plan has been updated. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-43 Response

Comment: The commenter requests including the Committee in the list of entities involved in the recommendations made regarding the endowment under the third bullet on page 8-9 of the Plan.

Response: Comment noted. This discussion in Chapter 8, “Plan Implementation”, has been updated in the Plan. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-44 Response

Comment: The commenter expresses concern about the high costs for the Preserve Management (as outlined in Table 8-2 of the Plan), and recommends the inclusion of a feedback loop for the endowment as it informs future decisions about the needed funds for the non-wasting endowment and provides meaningful opportunities to update and adjust the endowment deposits based on current facts/costs. The commenter also recommends species monitoring and other management activities should be appropriately timed over the life of the Plan so that excessive and unnecessary costs are not mandated during the first 10-15 years.

Response: Comment noted. Section 8.3, “Plan Funding”, of the Plan has been updated to clarify how the endowment will be established and steps for further review and input by the EOC (Environmental Oversight Committee) and Wildlife Agencies for review and approval. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-45 Response

Comment: The commenter states that the definition of a Change Circumstance under Fire in Section 8.6.2.2 of the Plan may need further refinement given that southern California is known to have an unnatural fire frequency and many Preserves have experience three fires in the last 50 years. The commenter also states that the language does not take into consideration the size of the fire, intensity, burn pattern, and how many acres of the OCTA Preserve that have burned. The commenter requests to quantify these details that prompt a changed circumstance as well document what caused the fire ignition in the first place.

Response: Comment noted. The criteria for changed circumstances was developed in coordination with the Wildlife Agencies taking into consider the fire history on the individual Preserves, fire history across the Plan Area, and input from other entities managing open space Preserves in Orange County. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-46 Response

Comment: The commenter suggests updating the Urban-Wildland Interface defined in Appendix A to the Plan to be consistent with the EIR/EIS and Conservation Plan and calling it the Wildland-Urban Interface. Also, commenter recommends reconsidering the definition of the Wildland-Urban Interface because there are too many unclear terms used in the existing definition.

Response. Comment noted. The Urban-Wildland Interface entry in Appendix A of the Plan has been revised. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-47 Response

Comment: The commenter expresses they were pleased to see the inclusion of thoughtful recreational uses and recreational planning in the Draft Implementing Agreement that took into consideration appropriate constraints to protect the Covered Species and natural communities.

Response. Comment noted. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-48 Response

Comment: The commenter requests the Monitoring and Reporting discussion for the Annual Report in Appendix B clarify when the first Annual Report will be filed.

Response. Comment noted. The annual report requirements are described in Section 8.4 of the Plan. The annual report will be submitted to the Wildlife Agencies by March 1 of each calendar year (or other date as agreed upon by OCTA and the Wildlife Agencies). An annual public meeting will be held within 60 days of submittal/publication of the draft report on the website or in conjunction with an EOC meeting. No changes to the Implementing Agreement are required as a result of this comment.

Comment 12-49 Response

Comment: The commenter requests to define “protected” under Core Habitat Areas in Appendix C.5 before describing how much land is protected within each of the Core Habitat Areas.

Response. Comment noted. This definition has been added to Appendix C.5. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-50 Response

Comment: The commenter requests the map in Appendix C.6 showing the Chino Hills State Park be updated and provided a link to an updated GIS layer for boundary of Chino Hills State Park.

Response. Comment noted. This map was developed using data at a regional scale and, although some areas may be out of date, the purpose is to show the general regional context of the Preserve. The suggested changes do not change the intent of the figure and have not been incorporated into the Appendix C.6. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-51 Response

Comment: The commenter states that Exhibit 4 of Appendix C.6 shows the Firestone Boy Scout Reservation which is not protected because it is in private ownership with no conservation overlay or easement. Additionally, the entire Irvine Ranch Open Space lands and Central-Coastal Conservation Plan preserves are missing from this map and should be integrated to provide a more accurate regional environmental setting.

Response. Comment noted. This map was developed using data at a regional scale and, although some areas may be out of date, the purpose is to show the regional environmental setting and not a parcel-by-parcel inventory. The suggested parcel-specific changes have not been incorporated into the Appendix. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-52 Response

Comment: The commenter notes that the first paragraph on page 8 of Appendix C.6 of the Plan appears to have been copied from the South County Baseline Biological Reports and should be updated with information for the Hayashi property.

Response. Comment noted. This paragraph references checking plant reference sites at Trabuco Canyon and does not require editing in the Hayashi report. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-53 Response

Comment: The commenter notes that the first paragraph on page 3 of Appendix C.6 of the Plan appears to have been copied from the Hayashi Baseline Biological Reports and should be updated with information for the South County Properties.

Response. Comment noted. The description is applicable to south county properties and is described further within the document specifically to Trabuco Canyon. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-54 Response

Comment: The commenter states that Section 1.2.2, Regional Environmental Setting, in Appendix C.6 of the Plan is missing the Hafen Reserve and should be included on the map to provide a more accurate context.

Response: Comment noted. Some regional data and/or specific properties may not have been included; however, this mapping is more accurately represented on Figure 6-4 of the Plan. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-55 Response

Comment: The commenter states that the discussion of fire history on page 5 of Appendix C.6 of the Plan states that 25 separate fires have occurred, but Exhibit 5 only shows four fires. The assertion of 25 fires needs to be corrected or clarified because it doesn't align with the figures in the document.

Response: Comment noted. The text on page 5 of Appendix C.6 of the Plan has been edited to clarify that the 25 fires were not specific to just the south county properties but occurred across all of Orange County. No further changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-56 Response

Comment: The commenter notes the documentation of a eucalyptus grove on the Ferber Ranch property on page 20 of Appendix C.6 of the Plan and questions if OCTA has any plans to study or remove of this plant from the Preserve.

Response: Comment noted. Specific vegetation management decisions for each Preserve will be addressed in the individual RMPs. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 12-57 Response

Comment: The commenter states they are pleased to see OCTA had convened an Independent Science Advisory Board to contribute to the Conservation Plan and recommends the use of SMART objectives format: Specific, Measurable, Achievable, Relevant, and Timely to hone in on quantifiable biological goals.

Response: Comment noted. Preserve-specific objectives will be included in each of the RMPs that are based on the Specific, Measurable, Achievable, Relevant, Timely (SMART) criteria/guidelines set forth in the Plan. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 13: Sea and Sage Audubon– 2/5/15



February 5, 2015

Dan Phu, Section Manager
Orange County Transportation Authority
550 Main Street
Orange, CA 92863

RE: NCCP/HCP

Dear Mr. Phu:

We are writing on behalf of Sea and Sage Audubon Society in Orange County to express our support for and provide comments to the Orange County Transportation Authority's (OCTA) Natural Community Conservation and Habitat Conservation Plan (NCCP/HCP) and the associated Environmental Impact Report/Environmental Impact Statement (EIR/EIS). We have few comments, but would like to go on record stating that we agree with the vast majority of comments submitted by the Measure M Environmental Coalition in a letter dated Feb 3, 2015. We also support Alternative 2 as the best alternative.

In general, regarding Biological Goals Sections we would like to see language included for habitat and species management planning and restoration goals that accounts for climate change and its predictable long term impacts. Audubon is taking a lead in advocating preparation and planning for the impacts of climate change to birds and their habitats. Long term planning for wildlife reserves in southern California must take into account the possible changes to habitats such as Coastal Sage Scrub, Oak Woodlands and grasslands in order to protect the many threatened and endangered species within the region.

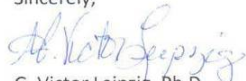
In regards to planning for access and recreation on properties purchased with Measure M funds for the purpose of protecting wildlife and habitats, we urge you to take all steps to identify early-on where and what types of access are appropriate, if any. We recognize the need in highly congested Orange County for public access to open space, however we are also aware that our small wildlife reserves are easily impacted by inappropriate use and/or over use. We strongly believe that it is in everyone's best interest to identify opportunities and restrictions as early and completely as possible.

We are very pleased that OCTA has taken the steps to purchase important properties and to produce a responsible and well-conceived NCCP/ HCP plan. We hope you will continue to work to improve the plan through this process, the comments you received from groups like the Environmental Coalition, and

13-1

13-1 | through the implementation and long term management of the plan and the habitats it will be tasked to
cont. | protect.

Sincerely;



G. Victor Leipzig, Ph.D

Scott Thomas, Conservation and Raptor Research



Sea & Sage Audubon Society is an Orange County chapter of National Audubon Society with nearly 3,500 local members dedicated to the protection and appreciation of birds, other wildlife, and their habitats through education, conservation, scientific research, and volunteer opportunities

Response to Comment Letter 13: Sea & Sage Audubon– 2/5/15

Comment 13-1 Response

Comment: The commenter expresses support for the Proposed Plan and states agreement with the majority of comments submitted by the Environmental Coalition in a letter dated Feb. 3, 2015. The commenter further states support for Alternative 2 as the best alternative.

The commenter would like to see language included for habitat and species management planning and restoration goals that account for climate change and its predictable long term impacts. The commenter also states concern with potential impacts on small wildlife reserves from inappropriate use and/or over use and urges early action on the identification of locations and types of access.

Response: Thank you for your comments. The participation of the commenter in the public review of this document is appreciated. These comments have been noted for the record. The Plan's conservation strategy includes a number of aspects that are designed to address the changes in temperature/precipitation, altered fire regimes, and transition of habitats over time resulting from climate change. These include:

- Conservation across environmental gradients: The Plan includes a specific biological goal (Landscape Goal 3) and objective (Landscape Objective 3.1) to protect, enhance, and/or restore natural landscapes with high habitat diversity across a range of environmental gradients. OCTA has acquired seven Preserves and approved funding of 11 restoration projects that occur throughout the Plan Area across a range of environmental gradients. Preserves and restoration projects occur from coastal areas to inland foothills, and are distributed across the Plan Area, north to south, and east to west. The location and distribution of the Preserve and restoration projects captures a range of environmental gradients, including a range of climatic conditions (temperature and rainfall), and elevation gradients (which are a surrogate for gradients of climate, geology, and topography). Inclusion of a range of environmental gradients protects a greater diversity of environmental conditions and greater species diversity, and provides opportunities for species to adapt to changed circumstances including climate change by dispersing along environmental gradients. See Section 6.2, "Landscape-Level Conservation Analysis", of the Plan.
- Preservation of lands adjacent of existing protected lands: The Plan includes a biological goals (Landscape Goal 1, 2) and objectives (Landscape Objective 1.1, 2.1) to protect lands adjacent to existing protected lands and add to blocks of protected open space. OCTA acquired seven Preserves—Aliso Canyon, Ferber Ranch, Hafen, Hayashi, MacPherson, O'Neill Oaks, and Saddle Creek South Preserves. All of these Preserves are adjacent to existing protected lands, are located within priority conservation areas as identified in the CBI Conservation Assessment (CBI 2009), and add to the protection of large blocks of natural open space in areas important for regional conservation. These Preserves also enhance connectivity between the larger blocks of already conserved lands, which will facilitate movement of the Covered Species as they adjust and transition to different habitat areas as a result of climate change.
- Adaptive Management of Preserves: The Plan sets forth an adaptive management strategy (see Section 7.2.7, "Adaptive Management and Monitoring of the Preserves", of the Plan) for management of the OCTA acquired Preserves. A specific line item has been included in the Plan funding analysis to address adaptive management issues over time. The Plan recognizes that


management of Preserves and the protection of Covered Species and their habitat on the Preserves will most likely have to change over time with changing conditions. The adaptive management structure identifies threats and stressors (see draft conceptual models in Section 7.2.8, “Summary of Adaptive Management Actions for Conserved Resources”, of the Plan) and the connections with natural drivers such as climate change.

- Changed Circumstances. The Plan includes a discussion of Changed Circumstances, which is defined under the USFWS’s No Surprises rule as “changes in circumstances affecting a species or geographic area covered by a conservation plan that can reasonably be anticipated by plan developers and the USFWS and that can be planned for.” The effects of climate change as they relate to Changed Circumstances are discussed in Chapter 8, “Plan Implementation”, of the M2 NCCP/HCP.

Regarding access, appropriate levels of recreation, types of access, and their locations would be discussed under the site site-specific RMPs. Please see the Master Responses A and B within the Trails/Public section of these response to comments for a more detailed description of how trails and public access will be addressed in the RMPs for each Preserve. No changes to the Final EIR/EIS are required as a result of this comment.

Comment Letter 14: Endangered Habitat League– 2/6/15

COMMENT FORM

#5		<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Friday, February 06, 2015 9:07:29 AM Last Modified: Friday, February 06, 2015 9:09:23 AM Time Spent: 00:01:54 IP Address: 76.168.122.98</p>
-----------	---	---

PAGE 1

Q1: Name	Dan Silver
Q2: Title	Executive Director
Q3: Organization or business (if applicable)	Endangered Habitats League
Q4: Address	8424 Santa Monica Blvd., Suite A 592
Q5: City	Los Angeles
Q6: State	CA
Q7: Zip	90069
Q8: Phone	(213) 804-2750
Q9: Fax	<i>Respondent skipped this question</i>
Q10: E-Mail	dsilverla@me.com
<p>Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.</p> <p>Please find this additional comment from Endangered Habitats League:</p> <p>14-1 We support Alternative 2, the Proposed Project.</p> <p>Thank you</p>	

Response to Comment Letter 14: Endangered Habitats League (EHL) – 2/6/15

Comment 14-1 Response

Comment: The commenter expresses support for Alternative 2 of the Proposed Plan.

Response: Thank you for your comment. The comment's support for Alternative 2 has been noted for the record. No changes to the Final EIR/EIS are required as a result of this comment.

9.2.3 Interested Parties Comments

Comment Letter 15: Lisa Perez – 11/20/14

From: [Lisa P.](#)
To: [OCTA NCCP HCP Comments](#)
Subject: concern
Date: Thursday, November 20, 2014 2:07:17 PM

15-1

Q: Are there any plans to ever install a left turn signal on Hewes Street to make a left onto Chapman Ave? There are always long lines to turn left especially during peak hours, seven days a week. This intersection has had many car accidents because people turn in front of oncoming traffic. This would help with the many pedestrians as well. I've was told once by the city that it wasn't busy enough for a signal but that is far from the truth. Hewes Street can be a super busy street. I'm stumped as to why smaller streets have a turn arrow such as Collins to make a left turn onto Glassell. I even have pictures of accidents on Hewes & Chapman.

Lisa Perez
Orange

Response to Comment Letter 15: Lisa Perez – 11/20/14


Comment 15-1 Response

Comment: The commenter asks if there are any plans to install a left turn signal on Hewes Street to make a left onto Chapman Ave because there are always long lines to turn left especially during peak hours, seven days a week.

Response: This is a location Hewes Street and Chapman Ave are not identified as part of the M2 freeway improvement projects. Improvements to local roads are addressed outside the M2 program. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment Letter 16: Paul Thier – 1/27/15

COMMENT FORM

#2		<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Tuesday, January 27, 2015 2:35:53 PM Last Modified: Tuesday, January 27, 2015 2:38:25 PM Time Spent: 00:02:31 IP Address: 166.176.59.215</p>
-----------	---	---

PAGE 1

Q1: Name	Paul Thier
Q2: Title	<i>Respondent skipped this question</i>
Q3: Organization or business (if applicable)	<i>Respondent skipped this question</i>
Q4: Address	PO Box 57
Q5: City	Tranuco Canyon
Q6: State	Ca
Q7: Zip	92678
Q8: Phone	<i>Respondent skipped this question</i>
Q9: Fax	<i>Respondent skipped this question</i>
Q10: E-Mail	<i>Respondent skipped this question</i>
<p>Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.</p>	
16-1	The provisions in section 7 for adjacent property owners is tantamount to inverse condemnation.

Response to Comment Letter 16: Paul Thier – 1/27/15


Comment 16-1 Response

Comment: The commenter states that the provisions of Chapter 7, “Management and Monitoring”, of the Plan are equivalent to inverse condemnation.

Response: Comment noted, however OCTA does not agree with this comment. Section 7.2.5.6, “Land Use Adjacent to Preserves”, of the Plan states that Preserve Managers will coordinate with existing land owners adjacent to a Preserve to disseminate information ‘to heighten their awareness of the Preserves’ role in achieving the M2 NCCP/HCP biological goals, and provide information regarding approved access, appropriate plantings, restrictions on construction or disturbance within Preserve boundaries, pet and livestock control, fire management, and other adjacency issues.’ OCTA does not have land use authority over adjacent properties owners that could result in inverse condemnation. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment Letter 17: Philip Bettencourt – 1/28/15

COMMENT FORM

#3		<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Wednesday, January 28, 2015 9:59:59 AM Last Modified: Wednesday, January 28, 2015 10:19:29 AM Time Spent: 00:19:30 IP Address: 68.15.67.188</p>
-----------	---	--

PAGE 1

Q1: Name	Philip Bettencourt
Q2: Title	Principal
Q3: Organization or business (if applicable)	Bettencourt & Associates, Real Estate Development Planning
Q4: Address	14 Corporate Plaza
Q5: City	Newport Beach
Q6: State	California
Q7: Zip	92660
Q8: Phone	9497200970
Q9: Fax	Digital Media Only
Q10: E-Mail	philip@bettencourtplans.com

COMMENT FORM

Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

Dan and colleagues, could you please address: Are the properties subject to the official evaluation only those properties designated as OCTA Preserves and/or OCTA Restoration Projects?

Does any of the CEQA analysis address properties that you now have under review for possible future acquisitions and that are subject to Closed Session conversations?

What about other candidate properties that may have been nominated by others but that are not yet on official negotiation lists?

17-1 Has OCTA already appropriated the funds necessary to meet the environmental stewardship objectives set forth in the environmental document?

Will it be necessary to take action on the pending Resource Management Plans (RMPs) before the DEIR can be certified as final and complete?

Are there special processing considerations for those properties that may also be in the Coastal Zone and that could be subject to a Coastal Development Permit; or, do any of the candidate sites meet that criteria?

Have responsible stewardship parties with adequate funding already been identified and credentialed for each of the properties under the proposed plan?

Thank you so much.

Response to Comment Letter 17: Philip Bettencourt – 1/28/15

Comment 17-1 Response

Comment: The commenter asks a number of questions that are included with the responses below.

Response: The following are responses to the questions provided:

- Are the properties subject to the official evaluation only those properties designated as OCTA Preserves and/or OCTA Restoration Projects? Only the OCTA acquired Preserves and OCTA funded restoration projects described in Chapter 5 of the Plan were evaluated as part of the M2 NCCP/HCP. Other properties and restoration projects were evaluated during the selection process, but only the selected properties and restoration projects are addressed in the Plan.
- Does any of the CEQA analysis address properties that you now have under review for possible future acquisitions and that are subject to Closed Session conversations? No. See response above.
- What about other candidate properties that may have been nominated by others but that are not yet on official negotiation lists? Other candidate properties were evaluated during the selection process, but are not included in the CEQA/NEPA analysis for the Plan. See responses above.
- Has OCTA already appropriated the funds necessary to meet the environmental stewardship objectives set forth in the environmental document? OCTA will establish an endowment to fund the long-term Preserve management and monitoring requirements set forth in the Plan. Funding for the endowment will be accumulated over 12 – 15 years. Interim Preserve management and monitoring will be funded through ongoing revenue generated under the M2 Environmental Mitigation Program. See Section 8.3, “Plan Funding”, of the Plan for more details.
- Will it be necessary to take action on the pending Resource Management Plans (RMPs) before the DEIR can be certified as final and complete? No. The Plan requires RMPs to be completed and approved by the Wildlife Agencies within 2 years from adoption of the Plan. Refer to Section 7.2.4, “Preparation of Resource Management Plans”, of the Plan. OCTA has initiated the RMPs prior the completed of the Plan and has circulated for public review draft versions of RMPs for five of the seven Preserves.
- Are there special processing considerations for those properties that may also be in the Coastal Zone and that could be subject to a Coastal Development Permit; or, do any of the candidate sites met that criteria? The Aliso Canyon Preserve is within the Coastal Zone. Acquisition of the property for conservation as a Preserve is not subject to a Coastal Development Permit.
- Have responsible stewardship parties with adequate funding already been identified and credentialed for each of the properties under the proposed plan? No. The identification of Preserve Managers for the OCTA acquired Preserves is anticipated to be completed 3-5 years after adoption of the Plan.

No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment Letter 18: Tom Hetzel – 2/5/15

From: [Tom Hetzel](#)
To: [OCTA NCCP_HCP_Comments](#)
Subject: Measure M2
Date: Thursday, February 05, 2015 12:34:01 PM

Thomas John Hetzel Sr. Taxpayer
 4318 East Ruth Place
 Orange Ca. 92869
 714-633-4364
thetzel@socal.rr.com

Comments on DEIR/EIS dated and sent 02-05-2015

18-1

Regarding lower Silverado restoration, Santiago Creek, Modjeska Creek and all tributaries recognized by OCTA as part of the Santa Ana watershed, connected to the ocean at time of statehood, having been stocked by the Department of Fish and Wildlife, having contained a salmon run at the time of statehood, and having been used for commercial purposes before and after statehood, to date navigable for periods of 2 to 6 months yearly, I find the current means of monitoring and managing to be a violation of Federal Law, State Law, The State Constitution, State Penal Codes, and action taken by the State Legislature. Furthermore, your maps are not accurate and include current residential property as well as State and privately owned lands. The current plan as presented could cause liability to the County by both State and Federal Agencies and law suits by public interest groups and individuals due to a violation of their rights to access the property in the confines of the proposed measure. Furthermore, monitoring at Level 2 “ provides compatible recreational opportunities for the public”. Since Level 1 was to be completed at the end of 2010 I would assume we are now at level 2,3, or 4. Lower Silverado has been fenced off with NO Trespassing Signs, and Rangers are giving tickets to anyone trying to recreate in the steam bed. There has been NO OPPORTUNITIES FOR RECREATION, no recreational agenda in the plan, and no funds appropriated for the purpose of public recreation in the plan. There are no plans of restoring water to the creek beds which I would deem necessary for plant and animal life as well as recreation, and will be addressed below since the property has been turned over to a public agency, use of water and appropriation of water must comply with State law under the Constitution of The State of California.. Furthermore, The Supreme court has ruled that navigable waters are owned by the State to be” held in trust” in perpetuity for the public, in all 50 States under the “Equal Footing Doctrine” up to the high water mark, and States Cannot sell or give away these lands under the “Public Trust Doctrine”. Responsible recreation must be allowed! The Santa Ana Watershed qualifies as navigable by, Title, Fishery, and Commerce as it originally linked to the ocean, therefore other States and Countries.

Only a Federal Judge can make a ruling on the navigability of a waterway, regardless how large or small. Navigable in fact, is navigable in law. M2 must be revised for the public and have compensations for public recreational use as well as comply with laws and the State and Federal Constitution.

Public access to streams and trails along streams is also supported by the legal doctrine of “Customs and Prescriptions”.

Article 1, Section 25 of the California Constitution, Right to Fish, Hunt and Scout. M2 is currently in

18-1
cont.

violation.

Article 10 Section 7 of the State Constitution : “Whenever any agency of government, local, State, or Federal, hereafter acquires any interest in real property in this State, the acceptance of the interest will constitute an agreement by the agency to conform to the laws of California as to the acquisition, control, use, and distribution of water with respect to the land so acquired.” M2 is in violation of Constitutional law and should review every article of section 10 before submitting a report.

Penal Code Section 370 : Anything which is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with comfortable enjoyment of life or property by an entire community or neighborhood, or by any considerable number of persons, OR UNLAWFULLY OBSTRUCTS THE FREE PASSAGE OR USE OF ANY LAKE, RIVER, BAY, STREAM, CANAL OR BASIN, OR ANY PUBLIC PARK, SQUARE, STREET OR HIGHWAY, IS A PUBLIC NUISANCE. M2 IS IN VIOLATION OF THIS Cal. Penal code, a criminal offense.

Harbors and Navigation Code Section 131 : Any person who lawfully obstructs the navigation of any navigable waters, is guilty of a misdemeanor. M2 violates this law.

66478.3 The Legislature further finds and declares that it is essential to the health and well-being of all citizens of this state that public access to the public natural resources be increased. It is the intent of the Legislature to increase public access to public natural resources.

Prior to any bridge on a state highway, county road, or city street being constructed, over a navigable waterway, the State, county or city is required to hold a public hearing and issue a report to consider the feasibility of providing public access to the waterway for recreational purposes. See Streets and highway codes 84.5 state, 991 county, 1809 city. I have been told by the environmental investigator for the O.C. District Attorney’s office that no public hearings have been held for areas in the M2 proposal, as well as other areas of the county.

The California Constitution states, “No individual, partnership, or corporation claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this state, shall be permitted to exclude the right of way to such water whenever it is required for ANY public purposes, nor destroy or obstruct the free navigation of such water, and the Legislature shall enact laws as will give most LIBERAL construction of this provision, so that access to the navigable waters of this state shall always be attainable for the people thereof.

M2 has to be revised to comply with the law, and the Constitution of the State. Public use for trails and recreation have to be of major importance and well defined in the plan with appropriated funds.

For these reasons

Response to Comment Letter 18: Tom Hetzel – 2/5/15

Comment 18-1 Response

Comment: The commenter states that the current means of monitoring and managing the lower Silverado restoration Santiago Creek, Modjeska Creek and all tributaries to be a violation of Federal Law, State Law, The State Constitution, State Penal Codes, and action taken by the State Legislature. The commenter states that the Plan and M2 needs to be revised to comply with the law and the Constitution of the State, and public use for trails and recreation has to be of major importance and well defined in the Plan with appropriated funds.

Response: The Lower Silverado restoration project is being funded by OCTA and is being implemented by the Irvine Ranch Conservancy (IRC). The project site is owned in fee by the County of Orange, and Orange County Parks is responsible for the long-term stewardship of the property as an open space reserve. IRC and the County of Orange are responsible for the management and monitoring of the restoration project area and control of access to the property. The M2 NCCP/HCP EIR/EIS does not address specific access issue for the restoration projects. It is the responsibility of the Restoration Project Sponsors (in this case The Irvine Ranch Conservancy) in conjunction with the land owner, to identify and document potential effects and obtain separate permits and environmental clearance, as necessary and appropriate, on their own to address the effects (see Section 3.3.6, *Funded Restoration Projects*). In many cases the lands specifically have carefully delineated conservation easements which allow for limited and managed public access and use. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment Letter 19: Ron Rempel – 2/5/15

Date: February 5, 2015

To: Dan Phu, OCTA Section Manager

From: Ron Rempel

Subject: Comments on OCTA's draft NCCP and associated Documents

19-1

I commend OCTA for their Early Action Plan (EAP) implementation efforts to improve the status and trend of multiple species in Orange County, including the completed land acquisitions and funding assistance for wildlife fencing along Hwy 241. The completed land acquisitions will benefit multiple species and natural communities although they will not likely change the uncertain status and downward trend of multiple proposed covered species in the OCTA M2 Natural Community Conservation Plan/Habitat Conservation Plan (Plan) area. The EAP efforts only partially focused on the already identified key factors affecting the long-term survival of proposed covered species in Orange County. In some instances, the proposed actions may be the correct ones, but the Plan lacks the supporting biological information to support that conclusion. Because of the inadequacy of the Plan and failure to utilize the best scientific information available the Plan will need to be revised and re-circulated for public review and comment.

While OCTA has exhibited its desire to take critical actions to conserve species, its consultant has failed to prepare a defensible Plan based on the best biological information available and that DFW has failed to provide appropriate guidance during the preparation and review of the administrative draft of the plan. While the plan fails to utilize the best scientific information available, DFW had an extensive amount of information and/or knowledge that the information was available but apparently failed to provide it to OCTA and their consultant. Most of the relevant scientific information missing from the Plan was a result research and monitoring funded and/or permitted by DFW. In my 30+ years of conservation plan experience (including preparing, implementing, developing monitoring programs and developing guidelines/statutes for NCCPs), there has not been an NCCP planning effort that has access to better scientific information regarding proposed covered species than this Plan yet that scientific information was not incorporated the Plan. The Plan (including appendices) fails to utilize the best available scientific information regarding the proposed covered species and thereby make it available to support the findings DFW is required to make pursuant to the NCCPA

19-2

While the Plan includes species and natural community goals and objectives, they do not address the primary threats and stressors affecting many of the proposed covered species. OCTA would have been much better served by its consultant and DFW if they (DFW and ICF International) had collaborated on developing a table showing the known threats and stressors to the proposed covered species in the Plan area and then utilizing the compiled information to inform the development of conservation measures. DFW has an obligation to assist OCTA in this effort since

19-2
(cont.)

most of the species are not federally listed and DFW is the trustee agency for all of the proposed covered species. As such, its responsibilities are far more extensive than just deciding if it will issue a Fish and Game Code Section 2835 permit for one or more of the proposed covered species.

As an example, a table for mountain lion would identify the following primary threats and stressors to the species in Plan area as:

- High mortality rates
 - Roads- Ortega Highway, Highway 241, etc.
 - DFW depredation permits
- Small effective population size/genetic isolation of the OC population from the lion population in Riverside and San Diego Counties east of I-15
- Increasing habitat fragmentation within individual home ranges

The Plan should have identified specific goals, objectives and actions to address the identified threats and stressors and what actions could be implemented to meet the identified objectives for conservation of a proposed covered species in OC. It would display which actions would be implemented (and why) by OCTA and Caltrans and which actions still need to be implemented through other efforts. The table would also include references to how the best available scientific information was used to identify the objectives and actions. Instead, the Plan identifies goals that appear to be based on mitigating impacts from OCTA/Caltrans projects and which may have little conservation benefit for the OC mountain lion population. The identified objectives and actions do not address the primary threats and stressors, if unchecked, will extirpate the mountain lion from OC.

The same issues with species' goals, objectives and actions exist for other proposed covered species including cactus wren, southwestern willow flycatcher and western pond turtle.

19-3

While it is commendable that OCTA and Caltrans are willing to help improve the Coal Canyon wildlife linkage, its improvement does not address the primary threats and stressors that are pushing the OC mountain lion towards extirpation in the Plan area. In fact, since there is has been not analysis of the potential mortality issues (increase exposure to road mortality and interactions with humans resulting in the issuance of depredation permits, etc.) that lions will face if connectivity to Chino Hills is established. Without improving the know genetic deficiency of the population, any mortality north of SR 91 may only cause greater OC lion population survival problems. This would be especially detrimental to the survival of the OC population should any of the most genetically diverse individuals be killed.

19-4

It appears that the approach used in the Plan in regard to biological information was that of trying to throw data at the proverbial wall to see what stuck rather than a clearly thought out approach to presenting the best available scientific data to

19-4

identify and support the conservation actions needed to meet the issuance requirements for an Fish and Game Code 2835 permit.

The Plan also seems to take for granted that the DFW assurances will be for the term of the permit even though several of the proposed covered species are declining in the Plan area and could be extirpated from much if not all of the County during the proposed 40 year permit period. DFW has the obligation to the citizens of California to avoid burdening them with costs they would incur if DFW assurances are triggered. The NCCPA issuance standards were written to force DFW to evaluate assurances for each species independently to ensure that any plan it approves meets or exceeds the Fish and Game Code Section 2820 permit issuance standards for each species. Clearly, the Plan as currently written does not utilize the best scientific information available to demonstrate the required standards are met. In addition, since many of the proposed covered species occur in multiple states, its unlikely that the FWS assurances would be triggered (FWS assurances only apply to federally listed species and must appropriate federal funds could not be utilized by DFW or FWS to meet its assurance obligations for unlisted species). This would result in the people of the state of California being the sole funders should the assurances provisions of the IA be triggered. The NCCPA provides direction to DFW to only provide assurances at the level commensurate with the risk to the species after all plan measures are considered.

The Plan and associated documents:

19-5

1. *Include confusing statements* – Example- The EIR states that DFW will be issuing an ITP pursuant to Section 2835 but a section 2835 permit is not an ITP. In fact, the 2835 permit would not cover monitoring and management activities if it was an ITP since these activities may at times result in intentional take of covered species. ESA terminology somehow crept into description of the state action. The Notice of availability says the project includes the issuance of a CESA incidental take permit and never mentions the issuance of the 2835 Permit. Requirements for a CESA permit (Fish and Game Code Section 2081 permit) are substantially different from at 2835 permit and cannot be issued for non-listed species.

19-6

2. *Utilizes generalized information when specific species information was available and it utilizes very outdated biological information-see specific comments below*

3. *Utilizes jargon which confuses readers and implies a level of science knowledge and/or monitoring specificity for which there is not supporting information* The Plan includes statements that statistical sampling/analyses will be implemented. While this sounds scientific, the Plan fails to acknowledge that statistical sampling/analysis will be difficult and will likely result in very large confidence intervals due to small preserve size relative to the area utilized by many of the covered species (i.e. inherent difficulty in identify independent

- 19-6
(cont.)
- sampling points etc. on most preserves versus doing preserve system monitoring). The problem will be exacerbated by low detection probabilities for many of the covered species and/or key habitat components, observer bias and inter-annual population variations that are very difficult if not impossible to control for. So while stating that statistical sampling/analyses will be done, its unlikely that a appropriate sampling design can even be developed for most of the OCTA acquired lands and proposed covered species, and most of the data collected at the proposed scale will not have any statistical significance for detecting change or determining the performance of the conservation measures including preserve management. An alternative OCTA should consider it assisting in funding monitoring at an appropriate scale across the preserve system (OCTA lands, USFS lands, DFW lands, Central and Coastal NCCP lands, etc. in Orange and adjacent counties. Scale appropriate monitoring efforts are already underway for some of the Plan proposed cover species.
- 19-7
4. *Utilizes maps and table which are inaccurate, unreadable and/or misleading- see specific comments below*
 5. *Fails to articulate how it fits with an already permitted Cenral and Coastal Orange County NCCP/HCP and the Orange County Southern Subregion HCP (OCSSHCP). This Plan fails to identify the natural lands that are already NCCP and/or ESA permitted for conversion to roads, houses and other uses and how their implementation affects proposed OCTA covered species. Since DFW refused to issue a 2835 permit for that OCSSHCP due to inadequate conservation of covered species, the assumption for this Plan must be that any new NCCP that overlaps with the OCSSHCP will have to do extra to ensure that conservation of any proposed covered species that is also on the OCSSHCP 10 (a) permit (i.e. only a mitigation standard was met for OCSSHCP permitted species).*
- 19-8
6. *Focuses on impacts of projects rather than conservation of species and consistently puts the measures in the Plan into the context of identified project impacts*
 7. *Fails to meet the Fish and Game Code Section 2820 standards for issuance of a Fish and Game Code Section 2835 permit*
- 19-9
8. *Fails to include the primary agency (Caltrans) that determines use of project lands as a permittee. Some propose mitigation measures will be on Caltrans property (wildlife crossings) and the IA does not require Caltrans to maintain enhancements on their property nor does OCTA have any ability to enforce the conditions of the Plan on Caltrans in perpetuity.*
- 19-10
9. *Fails to provide for an adaptive management and monitoring program (including collecting covariate data) appropriate for management of species, vegetation communities and ecosystem processes at a scale that is appropriate for the proposed covered species.*

19-11 | *10. Includes proposed covered species are the most studied and at greatest threat within the Plan area and in the south coast ecoregion without identify or addressing the primary threats and stressor to the continued persistence of the species in the Plan area or identifying how the Plan will reduce the risk of extirpation of the species from the Plan area*

Many of these deficiencies appear to be a result of poor consultant team input and the DFW's failure to provide the available up-to-date science for many of the proposed covered species and their lack of understanding of the requirements of the NCCPA rather than a result of OCTA's desire to help conserve species in Orange County and address the impacts of OCTA funded transportation projects.

The Plan utilizes generalized and or outdated species information when current specific species information was available and fails to address the inconsistencies between sections of the Plan and appendices

19-12

The Plan relies heavily on species distribution modeling to identify how the conservation measure and project impacts will benefit/impact covered species. The Plan references *Appendix C.3 Covered Species Models* as the underlying basis for assessing the conservation, mitigation and impacts identified in the Plan and as the basis for DFWs determinations regarding including a species on its 2835 permit. Appendix 3C states that statistical models are preferred over expert-based distribution modeling but statistical modeling was not used due to a lack of data points and identifies 50 well distributed data points as the minimum needed for statistical modeling and the adopts the use of expert-based models for all proposed covered species.

19-13

The expert-based approach was justified by stating that there was an inadequate number data points to utilize statistical modeling. Adequate data points do exist for multiple proposed covered species including the cactus wren, western pond turtle and mountain lion. Burdett et al, (*Ecosphere* 2010) utilized 61,000 data points (just slightly more than minimum 50 data points the Plan says are needed for statistical modeling) from 37 mountain lions in Orange, San Diego and Riverside to predict puma habitat. The Burdett puma habitat model for Orange County is significantly different and identifies less and a different configuration of lion habitat than what was predicted by the expert-based model the Plan relies on. The expert-based models in the Plan fail to take into account vegetation patch size, connectivity and other key factors that determine if a vegetation patch is likely to support a species. The Plan model identifies the San Joaquin Hills as potential puma habitat even though it is not connected to the Santa Ana Mountains nor have pumas been detected there in recent history. The CBI report (*Appendix C.5*) acknowledged that the San Joaquin Hills do not provide habitat for pumas yet the analysis of impacts to puma habitat and the acreages shown on Plan maps and tables includes the San Joaquin Hills as potential habitat. The same situation occurs with other disjunct or smaller patches of vegetation. Since the existence of significantly different and more

19-13
(cont.)

accurate puma data and model was not disclosed to the public, there is no way the public can evaluate the adequacy of the Plan in regards to the meeting an NCCPA conservation standard for mountain lion. Its unclear why the best available scientific information was not utilized in the Plan. DFW (including DFW personnel who worked on and/ or reviewed the administrative draft of the Plan) had the information. All of the data was collected under a DFW permit and DFW supported funding for the research and were on-site during several of the captures.

19-14

The cactus wren expert-based modeling is also inadequate and incorrect/inadequate for this species. There is more than adequate number of data points for this species and a statistical model has been developed and was available when the Plan was put out for public review. The model has been used in conjunction with the cactus wren genetic analyses to gain significant insight into the status and trend of cactus wrens in southern California. DFW (including personnel who worked on or reviewed the administrative draft of the Plan) were aware of the model and datasets well before the Plan was released for public comment. DFW helped fund the cactus wren data collection and its analysis. DFW was a member of the cactus wren working group that identified and supported gathering cactus wren data. The cactus wren genetic analysis also did not support the subspecies line that was referenced in the Plan's cactus wren species description, once again demonstrating that the plan does not contain the best biological information available. The Plan does not disclose to the public that there is better biological information available that might lead different biological decisions regarding conservation measures/priorities. It appears that the cactus wren species description was an archived document pulled out and inserted into the Plan rather than a description of the species applicable to the Plan area. Furthermore, the expert-based model fails to take into consideration widely accepted factors/threats/stressors that affect cactus wren occupancy of cactus patches including the minimum number of nesting pairs needed for a site to be self-supporting (not dependent of on-going immigration), dispersal distances/genetic isolation and the proximity of cactus habitat to existing or Plan proposed restoration of habitat which supports predators that are document to have a detrimental effect on cactus wren (e.g. cooper's hawk etc.).

19-15

The western pond turtle expert-based model is also inadequate. It utilizes a meta population concept wherein the all lands with certain characteristics are considered habitat for the species regardless of whether or not they have functional connectivity to occupied western pond turtle habitat. Western pond turtle genetic analyses (funded by DFW) have demonstrated that most watersheds in southern California have a distinct genetic signature that would not occur if populations were functionally connected. The data and report are available from USGS and DFW. Since the populations are not functionally connected, each watershed or sub-watershed needs to be evaluated to determine the benefits of the proposed conservation actions and covered activities impacts that might affect that watershed's population including if it authorized take of the species result in the populations falling below viable levels. The model fails to take into account the

19-15
(cont.)

impacts of roads that result in differential mortality to female turtles in comparison to male turtles. Areas cannot be identified as potential habitat if they have no potential to be viable habitat due to patch size, connectivity, abiotic effects etc. It should also be noted that there is recent literature showing there are multiple species of pond turtle in California.

Fails to meet the Fish and Game Code Section 2820 standards for issuance of a Fish and Game Code Section 2835 permit

Fish and Game Code Section 2820 requires evidence in the record that:

(2) The plan integrates adaptive management strategies that are periodically evaluated and modified based on the information from the monitoring program and other sources, which will assist in providing for the conservation of covered species and ecosystems within the plan area.

19-16

While the Plan includes a rather through section regarding adaptive management and monitoring, it misses key points and the identified monitoring protocol/methodology will not provide the data needed to demonstrate the effectiveness of the Plan for conserving proposed covered species. See specific comments on monitoring protocols/methodologies below. The specifics regarding the adaptive management strategies are not well fleshed out and are primarily deferred to the development of parcel specific management plans. As a result, they fail to address how they support the conservation of the proposed covered species across the 500,000 plus acre Plan area. None of the proposed preserves are of adequate size to conserve any of the covered species nor does the Plan identify how adaptive management will be implemented at an appropriate scale (integrate with the existing preserve system in Orange County including DFW lands and USFS administered public lands) to achieve conservation of the covered species in Orange County. The OCTA preserved lands may not be the most important lands on which to take critical adaptive management actions yet the Plan would require that the available funding be utilized on the OCTA preserve lands. The Plan needs to provide greater flexibility on where funds can be expended.

(4) The development of reserve systems and conservation measures in the plan area provides, as needed for the conservation of species, all of the following:

19-17

(A) Conserving, restoring, and managing representative natural and semi-natural landscapes to maintain the ecological integrity of large habitat blocks, ecosystem function, and biological diversity.

The Plan's proposed preserves do not maintain the integrity of large habitat blocks and ecosystem function nor is there an analysis of their benefit to the biological diversity of the Plan area. It may be possible to demonstrate how proposed

- 19-17 (cont.) | preserves meet this standard if they are analyzed, managed and monitored in the context of the overall Orange County preserve system.
- 19-18 | *(B) Establishing one or more reserves or other measures that provide equivalent conservation of covered species within the plan area and linkages between them and adjacent habitat areas outside of the plan area.*
While linkages are displayed on maps in the Plan, there is no commitment to secure the linkages nor does the funding available indicate that Plan implementation will conserve the identified linkages.
- 19-19 | *(C) Protecting and maintaining habitat areas that are large enough to support sustainable populations of covered species.*
The plan does not maintain habitat areas large enough to support populations of all covered species even when all conserved lands in Orange County are taken into consideration. Conserving some species (cactus wren and mountain lion) will require effectively linking conserved lands in Orange, San Diego and Riverside County and reducing fragmentation by roads e.g. Ortega Highway, I-15, I-5 etc. and this Plan lacks the funding flexibility to help accomplish restoration of the needed connectivity .
- 19-20 | *(D) Incorporating a range of environmental gradients (such as slope, elevation, aspect, and coastal or inland characteristics) and high habitat diversity to provide for shifting species distributions due to changed circumstances.*
The plan fails to specify and support how this will be accomplished but again it may be possible to demonstrate how this is accomplished in combination with other plans in OC.
- 19-21 | *(E) Sustaining the effective movement and interchange of organisms between habitat areas in a manner that maintains the ecological integrity of the habitat areas within the plan area.*
The plan’s monitoring program is inadequate to accomplish and/or demonstrate its on-going effectiveness in regards to this standard and no appropriate connectivity objectives are incorporated into the Plan
- 19-22 | *(5) The plan identifies activities, and any restrictions on those activities, allowed within reserve areas that are compatible with the conservation of species, habitats, natural communities, and their associated ecological functions.*

- 19-22
(cont.) | While the Plan identifies potential restrictions on activities allowed within preserve areas, it does not identify specific restrictions or triggers for when the restriction have to be implemented. Rather, it defers their identification to a future preserve management planning process which does not included public participation, disclosure nor identified funding for their implementation including any needed law enforcement.
- 19-23 | *(6) The plan contains specific conservation measures that meet the biological needs of covered species and that are based upon the best available scientific information regarding the status of covered species and the impacts of permitted activities on those species.*

Since the Plan does not utilize the best available scientific information for most of the proposed covered species (including western pond turtle, southwestern willow flycatcher, cactus wren and mountain) it is not possible to determine if this standard is met.
- 19-24 | *(7) The plan contains a monitoring program.*

While the Plan does including a monitoring program, it will not provide the data necessary to make adaptive management decisions, determine the status and trend of species within the Plan area nor is it relevant to the scale at which a monitoring of the proposed covered species has to be implemented to determine if conservation of covered species is actually being achieved. It is not integrated with the monitoring program for the Coastal and Central NCCP nor with the on-going regional monitoring programs, including those for puma, cactus wren and California gnatcatcher. While this deficiency might be resolved by increasing flexibility for monitoring fund expenditures (prioritized and coordinated), the Plan does not provide any direction or apparent flexibility to accomplish the needed integration.
- 19-25 | *(8) The plan contains an adaptive management program.*

While the Plan talks about adaptive management, specifics are deferred to the preparation of a preserve management plan which precludes public participation and review and the Plan section dealing with this issue focuses on adaptive management of a specific preserves rather than on adaptive management of the habitat for a species at an appropriate scale or of a vegetation community. The Plan does not address the cactus wren genetic issues between populations west and east of I-5 nor does it provide any funding to help reduce genetic isolation issues (e.g. translocations, egg transfers etc.).
- 19-26 | *(10) The plan contains provisions that ensure adequate funding to carry out the conservation actions identified in the plan.*

19-26
(cont.)

Since not all the conservation actions are presented in detail, it is not possible to determine if there is adequate funding to carry out the needed conservation actions, in particular those related to adaptive management and wildlife infrastructure facilities if its determined if they are needed based on on-site surveys. Also, since the monitoring protocols (including covariate data collection) are not adequate to meet NCCP standards, it is not possible to determine if the funding is adequate. The Plan identifies using the PAR or PAR like process to determine the funding level for preserves. The PAR program is notoriously poor at identifying the amount of funds needed for adaptive management and it is recommended it not be used. In addition, since it is proprietary software, the general public is unable to do any evaluation of the adequacy of the output funding level for accomplishing the identified management and monitoring. While OCTA appears to have committed to funding whatever it takes, OCTA has not committed to a blank check and DFW has historically underestimated management and monitoring costs and often reduces its and others obligations rather than figuring out how to aggregate funds to accomplish necessary tasks.

19-27

(b) A natural community conservation plan approved pursuant to this section shall include an implementation agreement that contains all of the following:

While there is an IA for the plan, it was placed in the appendices that are not generally reviewed and commented on by the public. There is no indication in the public notice for the review of the dEIR/EIS and Plan that its is available for public review and comment. The IA proposes to provide assurances for all proposed covered species for the 40 year term of the permit yet the Plan does not support providing assurances for 40 years. Based on the information in the Plan and the best available biological information, the appropriate term for assurances for some of the proposed covered species should be much less. The conservation of the western pond turtle, cactus wren, southwestern willow flycatcher and mountain lion is in grave doubt within the Plan area and the assurance for these species should be less than 10 years or the Plan needs to better demonstrate how the Plan in combination with already approved and potential future plans and other Caltrans actions will provide for the conservation of the proposed covered species in Orange County.

19-28

(d) Any data and reports associated with the monitoring program required by this section shall be available for public review. The entity managing the plan shall also conduct public workshops on an annual basis to provide information and evaluate progress toward attaining the conservation objectives of the plan.

The Plan makes no provision for making all the data associated with the monitoring program available to the public. While the Plan does mention submitting the data to DFW's BIOS data warehouse and the CNDDDB, neither of these are capable of handling a wide range of data (including covariate data). Additionally, DFW requires

19-28
(cont.)

a subscription to access CNDDDB data and DFW has and continues to exhibit a blatant disregard for providing data associated with NCCPs to the public and even fails to provide the data in a timely manner after receiving public record act requests. DFW also claims some NCCP associated monitoring data is restricted from disclosure pursuant to the requirements of California public records act. As a result, to meet the requirements of (d) in regards to “any data and reports associated with the monitoring program ... being made available for public review” OCTA will need to develop a mechanism to provide all the data for public review. OCTA may want to consider utilizing SCMTX, a database program developed by USGS and partially funded by SANDAG and accessed at SDMMP.com website, for data storage and associated public access rather than OCTA creating an entirely new program to serve up the data to the public.

(f) The department may provide assurances for plan participants commensurate with long-term conservation assurances and associated implementation measures pursuant to the approved plan.

19-29

The IA proposes to provide assurances for all proposed covered species for the 40 year term of the permit yet the Plan does not support providing assurances for 40 years. Based on the information in the Plan and the best available biological information, the appropriate term for assurances for some of the proposed covered species should be much less. The conservation of the western pond turtle, cactus wren, southwestern willow flycatcher and mountain lion is in grave doubt within the Plan area and the assurance for these species should be less than 10 years.

(1) When providing assurances pursuant to this subdivision, the department’s determination of the level of assurances and the time limits specified in the implementation agreement for assurances may be based on localized conditions and shall consider all of the following:

(A) The level of knowledge of the status of the covered species and natural communities.

19-30

A great deal is known about the status of many of the proposed covered species and the available data indicates an on-going decline, which if not remedied, will result in the extirpation of the species within the Plan area in the foreseeable future. Climate change will only exacerbate the issue. The mountain lion population in Orange County is already exhibiting classic signs associated with the loss of genetic diversity and since the pedigree of nearly all the pumas in Orange County is known, its is already possible to project how the loss of one or more key individual lions will create even larger genetic issues.

(B) The adequacy of analysis of the impact of take on covered species.

19-31

This was not addressed in the Plan using the best scientific information available

- 19-32 *(C) The use of the best available science to make assessments about the impacts of take, the reliability of mitigation strategies, and the appropriateness of monitoring techniques.*
- Much better scientific information is available for many of the proposed covered species and it would greatly improve the Plan's assessment of impacts and the efficacy of the mitigation strategies. The species accounts utilized in the Plan are boilerplate accounts that do not include the data collected/scientific analyses applicable to the proposed covered species. See SDMMP.com, USGS.gov and DFW's NCCP website for a myriad of reports that provide much better scientific information on the proposed covered species.
- 19-33 *(F) The degree of coordination and accessibility of centralized data for analysis and evaluation of the effectiveness of the plan.*
- The Plan proposes to send all data to DFW's Bios data warehouse with some data going on to CNDDDB for species tracked by the CNDDDB program. Neither system is adequate to handle monitoring data including the covariate data that must be collected. In most instances, the CNDDDB is only point location data and BIOS is merely a warehouse for data and is not a database capable of handling covariate data in a way that can be analyzed over time. In many instances, BIOS merely provides the person seeking a full dataset back to the source to obtain the complete dataset. Additionally, some datasets are not publically accessible and DFW requires a subscription to obtain CNDDDB data, thereby making it unavailable to the public. DFW also refuses to provide some datasets it holds and its required a public records act requests to try and obtain them and even when filed, DFW takes months to determine what data they will provide. DFW also contends that data in the CNDDDB is not subject to a public records act request. DFW does not have the capacity and technical expertise to analyze the data from NCCPs and summary reports as proposed by the Plan should not be considered the analyses required by the NCCPA.
- 19-34 *(G) The degree to which a thorough range of foreseeable circumstances are considered and provided for under the adaptive management program.*
- Foreseeable circumstances identified in the Plan are not supported by the best scientific data especially the fire return interval trigger to move from foreseeable to unforeseen. Instead of doing an analysis of the historical and recent past fire return intervals utilizing the available CDF FRAP data, an apparently arbitrary departure interval is selected. Since the potential for most foreseeable circumstances can be supported by data, that data should be used so it can be appropriately considered and provide for in the adaptive management program. The best available data suggest the return interval between fires may have a greater influence of the

19-34
(cont.)

vegetation community and species than just the frequency of fire return (i.e. if an area burns twice in twenty years but the fires are only three years apart, the impacts and costs of adaptive management will likely be greater than if the area burns twice in twenty years but the fires occur 15 years apart).

Fish and Game Code Section 2820 (a) requires the Department make specific findings based upon substantial evidence in the record and section (a) (6) States:

“The plan contains specific conservation measures that meet the biological needs of covered species and that are based upon the best available scientific information regarding the status of covered species and the impacts of permitted activities on those species.”

Clearly, the NCCP and supporting documents fall far short of utilizing the best available scientific information regarding the status of covered species. Much of the information provide dates back to the 1990s or prior. An example is using Zeiner et al (1990) as a primary reference for species distributions and habitat characteristics when more recent and applicable information is available.

19-35

Three of the covered species (western pond turtle, cactus wren and mountain lion) are some of the most studied species in southern California and the NCCP and associated CEQA document fail to disclose and utilize that information in evaluating the impacts of the Project on these species. While DFW and OCTA might argue that the information in these recent and very applicable studies was not know to the document preparers, that argument has no basis in fact since many of the studies:

- Were, in part, funded by DFW, FWS, NROC, WRCRCA, SANDAG, and TNC
- Were conducted by USGS and/or UCDWHC both of which have extensive histories in Orang County
- Have received local, state and/or national news coverage
- Have been extensively reviewed with some of the same DFW personnel and/or their supervisors that have been involved in the development the OCTA Plan
- Have been peer reviewed and are available on multiple websites and through scientific research literature sites

The results of these studies paint an entirely different picture of the status and trend of the three aforementioned species and the status of the southwestern willow flycatcher. All of these species are in far worse shape than disclosed in the NCCP and associated CEQA documents.

19-36

Below are specific comments regarding proposed monitoring (excerpted from the Plan):

19-36
(cont.)

Type	Frequency	Protocols/Methods
Vegetation		
Comprehensive	10 Years	Comprehensive vegetation mapping will be completed based on field surveys using the classification system from <i>A Manual of California Vegetation</i> , second edition, ¹ and <i>Vegetation Classification Manual for Orange County</i> (release pending).
Invasive Species	Annually	Invasive plant surveys will be conducted along natural conduits for dispersal (trails, drainages, disturbed areas) during general stewardship or biological monitoring, or through volunteer patrols.
Statistical Sampling	TBD (assumed every 4 years for this Plan)	Statistical sampling of vegetation cover will be completed at each Preserve to measure ecological changes using sampling design and field protocols developed in conjunction with NROC. ² This will involve stratified random sampling that takes into account habitat types, acreage, and statistical sampling.
Covered Species		
<i>Plants</i>		
Rare Plant Surveys	3 to 5 years, depending on precipitation conditions	Special-status plant surveys will be completed following CNPS and CDFW survey guidelines. ³ In addition to population counts or estimates, surveys will collect covariate data on vegetation composition and cover, invasive nonnative plants and other threats, and map the perimeter of the population or suitable habitat. Surveys will be completed during the appropriate blooming periods for each of the plants, which vary depending on rainfall and temperature. Therefore, reference populations will be monitored to determine appropriate survey times (generally between March and July).
<i>Fish</i>		
Arroyo chub	4 years	If arroyo chub habitat is identified on a Preserve, arroyo chub survey methods and protocols will be coordinated with the regional CDFW fisheries biologist.

While the Plan identifies monitoring protocols/methodologies and the implementation frequency for proposed covered species, a critical elements to understanding if they are appropriate is missing from the table- **“what is the question the protocol is intended to answer and how will it be used to inform management”?**

The CNPS/DFW survey guidelines were developed for the purpose of identifying what species occur on a project site not for long-term monitoring. This methodology is very invasive and if conducted on a regular basis will result in adverse impacts to the site being monitored. Based on extensive analysis of rare plant monitoring data in San Diego, USGS concluded that for most annual species, its difficult to collect rare plant time series data and subject to a meaningful statistical analysis due to a number of factors including inter-annual variations within sites and between sites. The USGS analyses led significantly changing the rare plant survey methodologies in San Diego. While some of the above protocol/methodology reflect the current state

19-36
(cont.)

Type	Frequency	Protocols/Methods
Vegetation		
Comprehensive	10 Years	Comprehensive vegetation mapping will be completed based on field surveys using the classification system from <i>A Manual of California Vegetation</i> , second edition, ¹ and <i>Vegetation Classification Manual for Orange County</i> (release pending).
Invasive Species	Annually	Invasive plant surveys will be conducted along natural conduits for dispersal (trails, drainages, disturbed areas) during general stewardship or biological monitoring, or through volunteer patrols.
Statistical Sampling	TBD (assumed every 4 years for this Plan)	Statistical sampling of vegetation cover will be completed at each Preserve to measure ecological changes using sampling design and field protocols developed in conjunction with NROC. ² This will involve stratified random sampling that takes into account habitat types, acreage, and statistical sampling.
Covered Species		
<i>Plants</i>		
Rare Plant Surveys	3 to 5 years, depending on precipitation conditions	Special-status plant surveys will be completed following CNPS and CDFW survey guidelines. ³ In addition to population counts or estimates, surveys will collect covariate data on vegetation composition and cover, invasive nonnative plants and other threats, and map the perimeter of the population or suitable habitat. Surveys will be completed during the appropriate blooming periods for each of the plants, which vary depending on rainfall and temperature. Therefore, reference populations will be monitored to determine appropriate survey times (generally between March and July).
<i>Fish</i>		
Arroyo chub	4 years	If arroyo chub habitat is identified on a Preserve, arroyo chub survey methods and protocols will be coordinated with the regional CDFW fisheries biologist.

While the Plan identifies monitoring protocols/methodologies and the implementation frequency for proposed covered species, a critical elements to understanding if they are appropriate is missing from the table- **“what is the question the protocol is intended to answer and how will it be used to inform management”?**

The CNPS/DFW survey guidelines were developed for the purpose of identifying what species occur on a project site not for long-term monitoring. This methodology is very invasive and if conducted on a regular basis will result in adverse impacts to the site being monitored. Based on extensive analysis of rare plant monitoring data in San Diego, USGS concluded that for most annual species, its difficult to collect rare plant time series data and subject to a meaningful statistical analysis due to a number of factors including inter-annual variations within sites and between sites. The USGS analyses led significantly changing the rare plant survey methodologies in San Diego. While some of the above protocol/methodology reflect the current state

19-36
(cont.)

of the science regarding long-term monitoring of rare plants for informing management decisions, the reference the CNPS/DFW survey guidelines should be deleted and the San Diego monitoring guidelines inserted. How the data will be analyzed and used to inform management needs to be included in the Plan. Will there be triggers for management of threats/stressor or will management only be triggered by a change in the plants population, or will it be triggered based on the change in the occupied area. The extent of the surveys should be included since plant populations expand and contract based on a variety of factors. Will reproduction be tracked and how will the long-term genetic viability (often a connectivity/pollinator issue and a requirement of the NCCPA) be regularly evaluated? Will seeds from various populations be placed in a seed repository to ensure populations that are lost due to fire, flood, etc. can be reestablished using site source material?

19-36
(cont.)

Type	Frequency	Protocols/Methods
<i>Reptiles</i>		
Coast horned lizard	4 years	Focused visual encounter surveys will be conducted for terrestrial reptiles during the peak activity period for the species. These surveys will follow the time-constrained search methodology. ⁴ Enough time should be devoted to each survey area to allow for complete coverage. Equal effort is expended in each area searched, as measured by the number of staff hours spent searching.
Orangethroat whiptail	4 years	Focused visual encounter surveys will be conducted for terrestrial reptiles during the peak activity period for the species. These surveys will follow the time-constrained search methodology. ⁴ Enough time should be devoted to each survey area to allow for complete coverage. Equal effort is expended in each area searched, as measured by the number of staff hours spent searching.
Western pond turtle	4 years	Visual surveys will be conducted for western pond turtle employing the USGS protocol ⁵ designed to determine pond turtle presence. This protocol requires that all aquatic habitat be broken into 250-meter segments and scanned for the presence of basking sites, aquatic refugia, streamside refugia, and upland nesting habitat. Attention will be focused on identifying pond turtles within open pools and potential basking areas.
<i>Birds</i>		
Cactus wren	4 years	Because of similar habitat requirements of cactus wren and coastal California gnatcatchers, surveys for cactus wren will be completed simultaneously with coastal California gnatcatcher surveys using the same protocols. ⁶
Coastal California gnatcatcher	4 years	Two surveys will be conducted in suitable habitats with at least 1 week between site visits; the surveys should be conducted in late winter/early spring. All visits must take place during the morning hours, and no more than 100 acres of suitable habitat may be surveyed per visit. With the exception of the timing and number of visits, surveys for coastal California gnatcatcher will follow USFWS coastal California gnatcatcher protocol, which includes playing tape vocalizations. ⁶
Least Bell's vireo	4 years	A total of three surveys will be conducted—one in mid-May, one in June, and one in early July. With the exception of the number and timing of visits, surveys for least Bell's vireo will follow the USFWS Least Bell's Vireo Survey Guidelines. ⁷
Southwestern willow flycatcher	4 years	A total of three surveys will be conducted—one in mid-May, one in June, and one in early July. With the exception of the number and timing of visits, surveys for southwestern willow flycatcher will follow the USFWS Southwestern Willow Flycatcher Protocol Revision, which includes playing tape vocalizations. ⁸

Horned lizard- It is unclear what the purpose of the horned lizard surveys is and how the data will be utilized to inform adaptive management. Additionally, the proposed survey methodology may or may not detect the species if it is present and due to the relatively small sizes of the Plan's preserves, the data collected will likely have no statistical validity. The Plan does not call for the collection of the covariate

19-36
(cont.)

data that is critical to informing management decisions (e.g. is herbaceous ground cover to high, did native ants disappear from the site, are argentine ants on the site, is there a change in the moisture on the site that will encourage argentine ant invasions, etc.). In addition, analyses currently under way to analyze connectivity of horned lizard populations in Orange, San Diego and Riverside Counties. If there is genetic structuring of horned lizard populations it is likely that individual populations will have to be monitored and managed independently of other populations. For the Plan's preserves, it will be critical to understand the extent of the horned lizard populations based on the vegetation patches they occupy rather than based on a preserve boundary. The proposed protocol/methodology fails to provide for monitoring at an appropriate scale for this species.

Western Pond Turtle The USGS western pond turtle survey methodology works very well for detecting if turtles are using a site but was not designed to monitor pond turtle populations over time. Critical to understanding the status and trend of western pond turtle populations is having statistically valid data on the sex and age structure of the population (individual and/or groups of turtles -almost exclusively males- may be detected at a site long after reproduction at the site has ceased and its viability as a population has declined to zero), changes in threats/stressors and changes in the upland and aquatic natural communities where they occur.

Cactus Wren- Cactus wren habitat, detection probabilities, optimal times to detect and specific survey methodologies are much different than that for gnatcatchers and should be done independently from gnatcatcher surveys. Since genetic and other studies have shown that cactus wrens are very sensitive to isolation (poor dispersers, fragment habitat patches, effects of predation events), this species should be monitored more intensively than gnatcatcher populations and extensive covariate data needs to be collected to inform management decisions. Individual pairs on preserves should be monitored for reproductive success. Immigration and emigration to and from preserves may be needed to evaluate the effectiveness of preserve management as well as food availability.

Gnatcatcher- Recent genetic evaluation of this species by USGS did not detect any genetic structuring of the southern California population. There is a multi-county gnatcatcher monitoring program being developed that will be initially implemented in 2016 and rather than doing gnatcatcher monitoring on Plan preserves, it would be more appropriate to contribute to the regional monitoring program for this species. Preserve monitoring related to this species should be focused on covariate data collection to inform vegetation management decisions. Due to the small preserve size (100s of acres not 1,000s) normal fluctuations in CSS patch occupancy by gnatcatchers, preserve level monitoring focused on the detection of this species will provide little reliable data at significant cost. Covariate data collection should be focused on key habitat parameters (bare ground, shrub layer compositions, herbaceous layer composition, etc.) to determine if they are changing.

19-36
(cont.)

Southwestern willow flycatcher – The USFWS survey methodology for this species was developed to detect the species and is not appropriate as a long-term monitoring protocol for a preserve that supports this species. If this species is detected utilizing any of the preserves (which is unlikely based on its current status in southern California), then a site specific monitoring program should be developed in conjunction with USGS – the primary agency monitoring this species in southern California.

Type	Frequency	Protocols/Methods
<i>Mammals</i>		
Bobcat	4 years	Prior to effectiveness monitoring surveys, set up wildlife movement cameras for at least 6 months to document current movement of wildlife on Preserve to be used by a qualified wildlife biologist to assess wildlife movement and connectivity.
Mountain lion	4 years	Prior to effectiveness monitoring surveys, set up wildlife movement cameras for at least 6 months to document current movement of wildlife on Preserve and to be used by a qualified wildlife biologist to assess wildlife movement and connectivity.

- ¹ Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens 2009. *A Manual of California Vegetation*, second edition. California Native Plant Society. Sacramento CA.
- ² Deutschman, D., S. Strahm, D. Bailey, J. Franklin and R. Lewison 2008. *Improving Statistical Sampling and Vegetation Monitoring for Open Space in Central Orange County*. Prepared for The Nature Reserve of Orange County (NROC).
- ³ California Native Plant Society. 2001. *CNPS Botanical Survey Guidelines*. Sacramento CA. Available: <http://www.cnps.org/cnps/rareplants/pdf/cnps_survey_guidelines.pdf>. Accessed: August 29 2012.
- ⁴ Corn, P. S., and R. B. Bury. 1990. *Sampling Methods for Terrestrial Amphibians and Reptiles*. USDA Forest Service, General and Technical Report PNW-GTR-256, 34 pp.
- ⁵ USGS. 2006. *USGS Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion, Survey Protocol, Version 1*.
- ⁶ USFWS. 1997. *Coastal California Gnatcatcher (Poliophtila californica californica) Presence/Absence Survey Guidelines*. Report from Carlsbad, California, Field Office, Dated July 28, 1997.
- ⁷ USFWS. 2001. *Least Bell's Vireo Survey Guidelines*. Report from Carlsbad, California, Field Office, dated January 19, 2001. 3 pp.
- ⁸ USFWS. 2000. *Southwestern Willow Flycatcher Protocol Revision 2000*. Unpublished report with cover letter dated July 11, 2000.

The monitoring requirements outlined in this section and as part of the avoidance and minimization measures set forth in Section 5.5 will be completed by a qualified biologist with the appropriate expertise and level of experience to complete these tasks. Table 7-2 defines the skills and experience for qualified biologist to complete effectiveness monitoring. General stewardship monitoring will require a biologist with at least 3 years of experience with the general biological resources of Orange County to identify and evaluate threat to Covered Species and habitats.

Bobcat- Putting up camera traps (even when done by camera trapping experts such as the biologist at USGS WERC) to monitor wildlife movement on a preserve is unlikely to provide meaningful data to inform management of the preserve. While camera trap studies can provide meaningful data, the scale at which they are conducted it critical to have reliable data to inform management and the size of the Plan’s preserves is too small to conduct meaningful monitoring of this species to inform management. The effort should be on collection of covariate data to identify changes in the preserve’s vegetation community that would have negative consequences for bobcats and providing funding support for the larger bobcat monitoring efforts in Orange County.

19-36
(cont.)

Mountain lion- Suggesting the use of camera traps to monitor use of the Plan's preserves indicates a total lack of understanding of how pumas utilize the landscape. Pumas are often very stealthy in their use the landscape, have large home ranges (5 – 100+ square miles) and are often not detected by cameras set by experts even when an individual is know to be frequenting an area. While a preserve manager might be very excited to know that a lion has crossed their preserve, not detecting one in no way indicates a lion hasn't traversed a preserve area and failure to detect does not mean no puma-focused preserve management is needed. In addition, even if a puma traverses a preserve, it may be so infrequent that it would not be detected based on the identified survey protocol/methodology. If there are deer present on the preserve, the focus should be on managing the preserve to maintain the deer population (i.e. puma foraging opportunities). To help conserve puma in Orange County, OCTA should help fund a long-term puma monitoring program in Orange County (including on-going genetic/pedigree analyses, help fund wildlife infrastructure to reduce puma road mortality in Orange County, help fund public education and a depredation reduction program (to reduce the number of lions taken on DFW depredation permits) and help with reestablishing puma connectivity to puma populations east of I-15 in Riverside and San Diego County.

19-37

Wildlife crossings and pre-project surveys

Incorporating wildlife movement monitoring into pre-project surveys is commendable, but as described will not likely detect use of existing undercrossing by multiple species due to (1) the length of time they will be conducted and (2) the methodologies used. USGS had done extensive monitoring of undercrossing in San Diego (funded by DFW and SANDAG) utilizing cameras. It required multiple types of camera trapping (different camera focal lengths, setting cameras at varying angles, differed triggering strategies) to detect a wide range of taxa utilizing the monitored crossings. Based on the USGS datasets, its possible to develop detection curves to design monitoring that maximizes detection probabilities for different taxa and the time frames that are most appropriate for each taxon. A simple issue that comes up with most camera traps studies is what does negative data mean. Is it a result of poor methodologies, bad timing (e.g. surveys were done during the inactive period for herpetofauna, the species only traverses the site infrequently (e.g. puma), where cameras were or were not placed or aimed correctly, etc.

The operational definitions of "important wildlife crossing" and "key habitat linkage" has to be included in the Plan to avoid changes in the interpretation of these terms over time and give the public an opportunity to comment on the definitions. The importance of any crossing or linkage may vary by species and function(s) (daily movement, genetic flow, rescue effect, etc.). Based on the current draft of the Plan, this determination will be made OCTA or an OCTA funded person and since the determination could result in significant additional project costs, there appears to be a disincentive to identify any crossing as important or any linkage a

key. An independent science based entity with experience doing wildlife crossing monitoring should be funded to do the work and they should have to report all findings to the wildlife agencies and make them public without review by OCTA or Caltrans.

19-37
(cont.)

The commitment to maintain wildlife crossing where they are detected and utilize the Caltrans manual (including openness ratio/index) sounds great but two significant issues arise which are not addressed. One, if a covered project increases the sight distance of an underpass/culvert or if it affects the value of the crossing to wildlife, how will the openness ratio of the existing facility be increased so as not to reduce the overall openness ratio? Two, since Caltrans is not a permittee, what mechanism will be available to the wildlife agencies and the public to force Caltrans to maintain the facility (including any needed fencing) in perpetuity. Caltrans does not have a stellar track record for doing such maintenance and in fact has failed to clean out culverts (even the one on SR 91 used in the 1990s by puma) that are known to utilized by wildlife unless its to maintain capacity for runoff.

19-38

The Plan also commits to not increasing wildlife road mortality. What methodology will be used to evaluate current conditions? The scientific literature indicates that many road kill studies may only detect 10% of the actual road mortality. What standard deviation will be used to determine if road mortality has or has not been increased and what will be the obligation of OCTA and Caltrans to remedy the situation should the pre-project threshold be exceeded?

Conservation Analysis Summary Tables

19-39

These table are flawed in regards to supporting the determination as to whether the Plan provides for the conservation of the species. They are based on a mitigation concept which might be appropriate for an HCP but which is totally inappropriate for an NCCP. The target acreages are based on direct and indirect impacts (with multipliers) and comparing if the acres of the preserve is above or below the “conservation target” as though providing the target acres (in combination with adaptive management, monitoring etc. provides for the conservation of the species. The Plan and associated documents must demonstrate that the Plan in combination with the other approved plans in the Plan area provides for the conservation of the species in the Plan area. This will require a much more robust analysis of the existing conserved lands and the critical threats and stressor affecting the covered species. While the analysis needs to be more robust its unclear what if any additional lands or conservation actions are needed for each of the covered species.

19-40

Appendix C.6 – Baseline Biological Assessment for the Hayashi Property

It states:

19-40 (cont.) *“Medium to larger mammalian predators (both carnivorous and omnivorous species) that were observed or are expected on the property in a variety of habitats include common striped skunk (Mephitis mephitis), northern raccoon (Procyon lotor), gray fox (Urocyon cinereoargenteus), coyote (Canis latrans), and bobcat. The mountain lion is also among the larger mammals associated with variety of vegetation communities on site. Mountain lions are known to occur within the Chino Hills, and are expected to occur on site.”*

Its unclear what data the author used to establish that mountain lions are known to occur with the Chino Hills since (1) they are no recent confirmed records of them in Chino Hills, (2) there are no records of lions moving across (or under) SR 91 since the 90s and there is no radio telemetry data showing that lions are utilizing the Chino Hills. Since this statement appears to be incorrect, its unclear how much other information in the report is incorrect and it makes utilizing this report to inform decisions on the adequacy of the NCCP questionable. Since the reports on other mitigation properties are not included it is not possible to determine their adequacy or reliability.

Appendix C.7 Additional Species Occurrence Maps

19-41 The information in *Table C.7.1 Covered Species Occurrence Data on IRC Managed Lands* appears to be very misleading especially since it does not define what an occurrence is nor does it identify the time frame over which the data collected. Someone unfamiliar with the data might assume that showing 1,306 cactus wren occurrences implies that there are at least 1,306 cactus wrens on IRC Managed Lands. This is clearly not the case nor are there 23 mountain lions or 4 willow flycatchers living on IRC Managed lands. It could just as easily mean that one cactus wren was detected 1,306 times or that 10 cactus wrens were detected 130.6 times or that 10 cactus wrens were detected 13 times per year for 10 years. The information for Aliso Creek has the same issues. While the faunal map attempts to identify the time frame over which the detections were aggregated for mapping purposes, it also fails to provide any significant information that is usable to support the issuance of the 2835 Permit. Issues that could have been dealt with in the preparation of this appendix include identifying what year is the present year (is present year 2010, 2012, 2013 or 2014?). Additionally, what does a symbol represent? An individual or a detection or? (i.e. do three closely spaced cactus wren points represent one bird or one pair detected three times, or three birds or three pairs detected one time or do they represent one detection every other year for 6 years?). Did all years have the same survey effort and detection probability for a species or is the data just a random collection of data made to look like it has meaning by presenting it in map and tabular form? Its unclear why the DFW reviewers didn't pick up on these issues during their review of the administrative draft since they have been to training sessions regarding the problems with this type of data presentation.

19-42 **On-going Need for Science, Management and Monitoring Committee**

19-42
(cont.)

Through past and current OCTA actions, OCTA appears to take conservation of species and habitats in the plan area seriously and it strives to do the “right thing”. What is disturbing about the Plan is that DFW failed to ensure the best scientific information was used to develop the plan and that many of the elements of the plan demonstrate the lack of DFW’s understanding of science, monitoring and adaptive management and their responsibilities regarding the conservation of wildlife that belongs to the people of the State. These varied issues should have been caught and remedied as part of DFW’s review of the administrative draft of the Plan. To better ensure that the best science is applied to the implementation of the Plan, OCTA should establish an independent Science, Management and Monitoring Committee consisting of experts in wildlife science, species, vegetation and natural communities monitoring and management. The committee would be independent of the wildlife agencies and provide on-going direction through OCTA regarding the implementation of the monitoring and preserve/species management associated with the Plan. Establishing this committee would help OCTA demonstrate to the public that the funds expended to implement the Plan are based on the best science and the highest priorities for the conservation of the proposed covered species in the Plan area and help ensure that funds are not wasted doing inappropriate management and studies. It would also help overcome DFW’s lack of science and data analysis expertise that is critical if the Plan is going to actually conserve the proposed covered species. Since the committee would be independent of the wildlife agencies, it would be free to debate the implications of the best available science for the long-term implementation of the Plan’s adaptive management and monitoring programs.

In closing, I would like to reiterate that OCTA’s efforts to assist with the conservation of species in Orange County is commendable but the Plan fails to demonstrate that the OCTA efforts will provide for the conservation of proposed covered species in the Plan area. This failure appears to be primarily due to an inadequate document rather than a lack of commitment on the part of OCTA to fund needed conservation efforts. Please let me know if you need assistance in obtaining the most relevant and best scientific data that’s available or have any questions regarding the above comments.

Sincerely

Ron Rempel
Rrempel2@msn.com

Response to Comment Letter 19: Ron Rempel – 2/5/15

The commenter provided a review/discussion on the adequacy of the OCTA NCCP/HCP and whether it meets the requirements of a Natural Community Conservation Plan as specified in DFG Code Section 2820. Various Sections of Chapters 5 and 6 of the Plan provide discussion/analyses of the NCCPA findings; however it is ultimately California Department of Fish and Wildlife (CDFW) that determines whether the findings can be made through issuance of the NCCP Permit. Based on our collaboration with CDFW, revisions to the Plan have been made to include more recent scientific publications on the Covered Species. We have also provided more explanation of how the Plan's conservation strategy complements and enhances the network of conserved lands that already exists throughout the Plan Area. These revisions however, did not result in a change to the overall conservation strategy for the OCTA Plan.

Based on our review, the commenter makes multiple references to the six following topics: A) use of best scientific information available, B) statistical sampling/analysis, C) Plan Area analysis, D) regional conservation efforts, E) modeling utilized for the NCCP, and F) Species Specific Comments. We first provide master responses to these six topics, and then provide responses to each of the individual comments of the letter.

Master Response 19-A

A. Best Available Scientific Information. The commenter communicated the opinion that the best scientific information available was not utilized for the development of the Plan.

Response: Finalization of the Plan has taken many years to complete. Earlier versions of the draft Plan relied on scientific information published prior to 2013. Although the commenter stated there were references missing from the Plan, but did not provide specific citations to be added to the Plan. However, OCTA has made a good faith effort to revise the Final Plan to include scientific studies published through 2015. This additional information strengthens our understanding of the status and distribution of certain Covered Species within the Plan Area; however, it did not result in substantial changes to the Plan's overall conservation strategy, goals and objectives, and/or preserve management and monitoring requirements. These references add to our understanding of the distribution, threats and stressors, and management and monitoring requirements for certain Covered Species, and have generally been incorporated into Species Accounts in Appendix C.2. These current studies/reports will also help to refine our adaptive management activities in the future including restoration on our preserves for species such as the cactus wren.

OCTA, as the Lead Agency, has determined that the Plan and the supporting environmental documents do not need to be recirculated. Although new biological information was added regarding many of the Covered Species, the basic Conservation Strategy did not substantially change and no additional conservation is being required. Beginning in 2007, with the signing of the Planning Agreement, there has been frequent and regular coordination between OCTA, the Wildlife Agencies, and other partners, including, but not limited to, consultants, Conservation Biology Institute (CBI), Environmental Oversight Committee (EOC), Science Advisors, and independent species experts. This coordination has resulted in a positive contribution to the overall conservation of natural resources within the Plan Area, including the acquisition of 1,300 acres of previously unconserved lands in key conservation areas and approximately 350 acres of restoration on conserved lands that support many of the Covered Species.

Master Response 19-B

- B. Statistical sampling/analysis: The commenter states that statistical sampling/analysis will be difficult and will likely result in very large confidence intervals due to small preserve size relative to the area utilized by many of the Covered Species.

Response: The Plan sets forth guidelines for effectiveness and adaptive management and monitoring protocols (see Section 7.2.7, “Adaptive Management and Monitoring of the Preserves” and Table 7-1 of the Plan), however it is ultimately the Preserve Managers and Monitoring Biologists, in conjunction with the Wildlife Agencies and other species experts, to review and select the most appropriate monitoring method(s) to address resource-specific management questions. For example, OCTA recently contracted with Dr. Sandra Desimone, noted coastal sage scrub ecologist/restoration specialist and Land Manager of the Audubon’s Starr Ranch Preserve, on development and implementation of the vegetation sampling design for a subset of the Preserves. The vegetation sampling design is being established and implemented in a manner consistent with other entities responsible for management of open space in Southern California. The monitoring methods will be included in the Preserve RMPs, which will be reviewed and updated every 5 years.

As stated in the Plan (see Chapter 7, “Management and Monitoring”), OCTA will not be responsible for conducting regional monitoring outside of their specific Preserves but will contribute monitoring data collected at OCTA Preserves in a format that can be integrated with regional monitoring databases, as appropriate. OCTA will stay abreast of regional monitoring issues through coordination with other management/monitoring entities, and may either participate in collecting data on its Preserves for regional monitoring purposes or will provide access to Preserves for other entities to collect regional biological monitoring data, if needed.

In addition, OCTA will implement an adaptive management and monitoring program as outlined in Chapter 7 of the Plan. OCTA was advised by CBI, an organization that specializes in local scientific expertise to support the conservation and recovery of biological diversity in its natural state through applied research, education, planning, and community service, to develop the adaptive management program. Implementation of the adaptive management program will include coordination/collaboration with other regional land managers.

Master Response 19-C

- C. Plan Area Analysis: The commenter states that the Plan should address county-wide conservation requirements and commitments.

Response: OCTA has defined the Plan Area to include all of Orange County so that the full range of conservation opportunities could be considered. The foundation of the OCTA NCCP/HCP conservation strategy is to conserve lands that complement and enhance the existing public lands that are currently managed by the U.S. Forest Service (USFS), California Department of Parks and Recreation (CDPR), CDFW, and County Parks and privately owned and/or privately managed conservation areas (e.g., National Audubon Society, Transportation Corridor Agency, The Trust for Public Land, and The Wildlands Conservancy) within the Plan Area. The OCTA NCCP/HCP conservation strategy of land acquisition and habitat restoration adjacent to or in the immediate vicinity of already conserved large habitat blocks provides for the conservation of species by filling in “priority conservation areas” identified in the Plan Area. The priority conservation areas were identified through a landscape level conservation assessment completed by Conservation Biology Institute (CBI) (2009). As stated above, CBI is an independent group that provides scientific expertise to support the conservation and recovery of biological diversity throughout the region.

The Conservation Assessment developed by CBI (2009) considered the entire County in order to develop recommendations for priority conservation areas and key linkages. The objectives of the CBI (2009) assessment were to: 1) develop an objective, science-based process to focus decision-making on regional conservation priorities; 2) use existing data and apply NCCP tenets of conservation planning; 3) map the distribution of conservation values of undeveloped lands in the Plan Area, including both protected and unprotected lands; 4) identify components of a regional reserve network, focusing on adding to existing reserve areas to expand large core habitat areas with habitat linkages between them to enhance their function; 5) develop specific conservation objectives to maximize conservation values for each core and linkage area; and 6) based on these objectives, identify areas where conservation of biological resources should be prioritized to improve landscape integrity and connectivity, protect rare species and their habitats, and ensure long-term persistence of natural processes across the Plan Area. A condensed version of the CBI Conservation Assessment (CBI 2009) is provided as Appendix C.5 of the Plan.

OCTA, in collaboration with the Wildlife Agencies, developed biological goals and objectives for the Plan based on the CBI (2009) county-wide conservation assessment. These goals and objectives were also developed commensurate with the level of anticipated impacts of the Covered Activities. In addition, Chapter 6 of the Plan provides an assessment of the conservation strategy by evaluating a broader set of biological goals and objectives at the landscape, natural community, and species level. The biological goals and objectives will be achieved through implementation of the conservation strategy (i.e., conservation of large blocks of habitat and the restoration of already conserved areas), which will benefit the biodiversity, natural communities, and habitat connectivity throughout key portions of the Plan Area, and provide for the conservation and management of the Covered Species. In addition, the OCTA Preserves were evaluated on the basis of their contribution to or improvement/enhancement of regional connectivity. Lastly, as CBI (2009) states in the assessment “priority conservation areas, are unprotected lands for which acquisition would be a “no regrets” decision, based on their contribution to the regional reserve system”. All seven of the OCTA Preserves are in priority conservation areas.

As described in Chapter 5, ‘Conservation Strategy’, “OCTA is not a general land use agency with the jurisdictional authority to establish a “stand-alone” Preserve system for the entire Plan Area, nor does OCTA affect development and conservation decisions subject to jurisdictions (various cities, County of Orange, etc.) having such land use authority. The Plan only authorizes habitat losses attributable to the Covered Activities. Because the Covered Activities extend across the Plan Area and overlap with the plan areas for other conservation planning efforts in Orange County, the Plan’s conservation strategy focuses on adding to and strengthening already conserved large blocks of habitat, connecting already protected areas, enhancing habitat within currently protected areas, and protecting important species habitat (e.g., designated critical habitat areas).

Master Response 19-D

D. Regional Conservation Efforts. The commenter notes that OCTA should be actively involved in regional conservation planning efforts.

Response: Although not a requirement of the NCCP Act, OCTA has and will continue to coordinate with other regional entities for the monitoring and adaptive management of the Preserves and the Covered Species. To date OCTA has been active in a number of regional conservation efforts including:

- 2016 CAGN Regional Monitoring - The OCTA Preserves were included in the 2016 CAGN regional monitoring design and OCTA assisted with data collection.
- Inter-Agency Puma Coordination Meetings - OCTA spear headed a working group that includes local, state, and federal agencies, as well as scientific experts (Dr. Winston Vickers, Associate veterinarian at the Wildlife Health Center at UC Davis; co-principal investigator of the Southern California Puma Project, and USGS staff). This group now meets on a periodic basis (approximately 4 times a year) to discuss southern California pumas as well as other regional topics.
- Orange County Tree Pests Group - OCTA is part of the Orange County Tree Pests group which is facilitated by University of California Agriculture and Natural Resources. The group was established in 2015 in order to share important information for topics related to tree pests (e.g., goldspotted oak borer beetle and polyphagous shot hole borer) as well as other emerging pests and diseases that are threatening our native southern California trees (oaks and riparian).
- Coast Working Group - OCTA has been a participant of the County of Orange Area Safety Taskforce (COAST) Working Group since its inception in 2013. COAST was established in order to convene staff from fire agencies, fire safe councils, public utilities, transportation agencies, natural resource management agencies, and open space land managers, to jointly identify problems and propose solutions for wildfire prevention. This working group meets on a regular basis at the Orange County Fire Authority headquarters and is currently working on publication of a Community Wildfire Protection Plan.

Master Response 19-E

- E. Modeling Utilized for the NCCP. Multiple times the commenter states that the modeling utilized for the NCCP was too general and not an appropriate tool to develop conservation actions.

Response: The species habitat suitability models used in the Plan were developed as a tool to evaluate and estimate impacts and conservation actions in a consistent manner. But the species models are only one set of information used for the Plan's conservation analysis. Other information that was also used included results of field surveys at each Preserve (see baseline biological resources technical reports in Appendix C.6 of the Plan), input from the restoration project entities of the habitat conditions and surrounding habitat at the restoration projects, and geographic location of the Preserves relative to the information in the 2009 Conservation Assessment. . These other sources of information were important to determine if the conservation actions are known to provide a direct benefit to Covered Species and their habitat and how these conservation actions contribute and strengthen regional habitat protection important for Covered Species.

Master Response 19-F

- F. Species Specific Comments. The commenter indicates that the models used and the identification of threats and stressors for some of the Covered Species are not specific enough to the Plan Area.

Response: The Plan relies on habitat suitability models and conceptual models developed by the consultant and CBI, which were reviewed and approved by the Wildlife Agencies (see species accounts in Appendix C.2, species model descriptions in Appendix C.3, and conceptual models included in Section 7.2.8, "Summary of Adaptive Management Actions for Conserved Resources", of the Plan). These models do identify known Plan Area threats and stressors (e.g., invasive plant species, recreation, fire, habitat conversion) for each of the Covered Species. Species-specific review

and/or updates to habitat suitability models and/or list of threat and stressors in the Final Plan include:

- Mountain Lion. The commenter makes recommendations pertaining to mountain lion in relation to NCCP Act requirements. The mountain lion model has been updated in the Final Plan to reflect that the San Joaquin Hills are not potentially suitable habitat for mountain lion. This change is consistent with the information in the Conservation Assessment (CBI 2009). In addition, the Covered Species table in Chapter 1 of the Plan has been updated to clarify that mountain lion is not being covered under the NCCP permit, and provisions of the NCCP Act therefore do not apply to this species.
- Cactus Wren. OCTA has incorporated recent genetic work for cactus wren conducted by the U.S. Geological Survey (USGS), which examined the structure of the cactus wren population in coastal southern California (Barr et al. 2013; Barr et al. 2015). In addition, OCTA obtained the results of a cactus wren model developed by the San Diego Management and Monitoring Program (SDMMP 2015) and was able to compare the results of this model with the cactus wren habitat model used in the Draft Plan. The output results were similar. Therefore, no changes to the cactus wren model used for the Plan were needed.
- Western Pond Turtle. OCTA has updated the Final Plan to incorporate information from recent studies on this species, which include genetic analysis of individuals across the state (e.g., Spinks and Schaffer 2005; Spinks et al. 2010 and 2014; Fisher et al. 2013). This genetic analysis determined that the Plan Area contains four management units/populations: 1) San Diego Creek/San Joaquin Marsh, 2) Shady Canyon Turtle Pond, 3) Ladd Canyon/Aliso Creek, and 4) San Juan/Oso/Trabuco (Fisher et al. 2013). The first three sites and portions of the fourth have some form of land protection that ensures the areas will not be directly impacted by urban development and therefore provide conserved suitable habitat for this species in the Plan Area. This information adds to our understanding of the distribution of western pond turtle within the Plan Area but did not change how areas of potentially suitable habitat were modeled across the Plan Area. Therefore, no changes to the western pond turtle model were necessary.

Individual Comment Responses

Comment 19-1 Response

Comment: The commenter commends OCTA on our efforts to improve the status and trends of species conservation in Orange County, but states that the Plan does not meet the criteria of the NCCP Act and does not use best available scientific information.

Response: OCTA thanks the commenter for recognizing OCTA's efforts to conserve important natural communities that support the Covered Species. The conservation strategy implemented under the M2 NCCP/HCP, which includes the acquisition of 1,300 acres of high quality habitats and the funding of 350 acres of restoration at locations important for regional habitat conservation, is an important tool to combat the potential downward trend in species populations. We believe the proposed conservation strategy has resulted in positive benefits for the Covered Species including preservation of high quality habitat, long-term protection and enhancement of important wildlife movement corridors, and the in-perpetuity conservation and adaptive management and monitoring of the 1,300-acre Preserve Area. These Preserves add to the protection of large blocks of natural

open space in areas important for regional conservation and strengthen the regional open space reserve network in the Plan Area.

Refer to Master Response 19-A and 19-C that addresses the use of best available scientific information and Plan Area Analysis. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-2 Response

Comment: The commenter states that the Plan should address primary threats and stressors affecting Covered Species and establish specific goals, objectives, and actions to address the threats and stressors throughout the Plan Area.

Response: The Species Accounts (Appendix C.2) identify species specific threats and stressors as does the species models presented in Section 7.2.8 of the Plan. Please see Master Response 19-E.

The Environmental Oversight Committee (EOC) established criteria to evaluate, rank, and select the properties considered for acquisition and the restoration projects considered for funding (Appendix D). One important criterion was the benefits provided to the Covered Species. This process was an important component for implementation of the Conservation Strategy, which is discussed in Master Response 19-C. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-3 Response

Comment: The commenter states improvements to the State Route 91 Coal Canyon wildlife linkage could be detrimental to the survival of mountain lion in Orange County.

Response: OCTA as well as the California Department of Parks and Recreation collaborated with Dr. Winston Vickers on the design and improvements for the North Coal Canyon restoration project. As noted above, Dr. Winston Vickers is a co-principal investigator of the Southern California Puma Project and a respected mountain lion expert. He was consulted on the OCTA funded restoration project to make improvements at Coal Canyon and supports efforts to improve this wildlife movement corridor. During a recent site visit/field meeting, he stated that the habitat to the north of the SR-91 is a good size and it increases the potential for the necessary back and forth movement that this species requires in order to survive in Southern California. Mountain lions have been reported on the north side of SR-91 as recently as July 2016. Warnings have been posted by Chino Hills State Park in response to these sightings. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-4 Response

Comment: The commenter notes that the Plan does not meet the criteria for issuance of a permit under the NCCPA for the Covered Species and for the permit term.

Response: OCTA worked closely with CDFW to design the Plan and its Conservation Strategy to meet the NCCP Act requirements. Approximately 75 percent of the undeveloped land in the Plan Area has some form of protection through open space land designations. These already-conserved lands support viable and self-sustaining populations of the Covered Species. In addition, numerous management efforts undertaken or funded by other open space management entities in Orange County (e.g., NCC, IRC, County Parks, CDPR, the Wildlife Agencies, USDA, Audubon, and other

stakeholders) have contributed to ensuring sustainable, reproducing populations of these species, which have persisted throughout the Plan Area in spite of the threats to their habitats from urbanization and wildfires. These adaptive management efforts include species surveys/monitoring, habitat restoration or enhancement, cactus salvage and restoration projects, translocation studies, recreational use studies, wildlife movement monitoring, and genetics studies.

The distribution of conserved lands in the Plan Area was a critical consideration when assessing how well the OCTA NCCP/HCP provides for the protection of habitat, natural communities, and species diversity on a landscape or ecosystem level; hence the importance of the CBI (2009) analysis and OCTA's commitment to purchase lands identified in the report as high priority acquisitions. To provide for the local conservation of each of the Covered Species, there must be enough land, and in the right locations, to ensure each Covered Species will be self-sustaining in perpetuity. The OCTA Preserve acquisition, in concert with already-protected lands across the Plan Area, provides this assurance by: 1) protecting significant amounts of currently unprotected lands in areas that functionally expand existing reserves; 2) protecting and/or enhancing existing occurrences of the Covered Species; 3) allowing for the creation, enhancement, and restoration of native habitats; 4) allowing for easier, more cost-effective management and monitoring; and 5) conserving and restoring habitat and species connectivity. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-5 Response

Comment: The commenter notes that the EIR states that CDFW will be issuing an incidental take permit (ITP) pursuant to Section 2835, which is incorrect terminology.

Response: This has been corrected in the Final EIR/EIS. No further changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-6 Response

Comment: The commenter states that an appropriate sampling cannot be developed for the OCTA acquired preserves and that OCTA should consider assisting in funding monitoring across a larger region (across Orange County and adjacent counties).

Response: Refer to Master Response 19-B. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-7 Response

Comment: The commenter states that the Plan fails to articulate how it fits with the already permitted Central and Coastal Orange County NCCP/HCP and the Orange County Southern Subregion HCP.

Response: The OCTA Plan is a standalone NCCP/HCP and does not have a regulatory connection with other plans in Orange County. However as stated in Master Response 19-C, the conservation strategy being implemented for the OCTA Plan is based on filling in "conservation gaps" between these other planning efforts. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-8 Response

Comment: The commenter states that the Plan focuses on projects rather than conservation of species and consistently puts the measures in the Plan into the context of identified project impacts.

Response: Consistent with other NCCP planning efforts in the region, a description of the Covered Activities and their estimated impacts to natural communities and the Covered Species is provided in the Plan. Quantifying the biological impacts allows a baseline to identify the necessary conservation required under the Plan. However, the Plan's overall conservation is based on a broader set of biological goals and objectives at the landscape, natural community, and species level that describe how the conservation strategy will be implemented within areas important for regional conservation purposes. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-9 Response

Comment: The commenter states that the Plan fails to include the primary agency (Caltrans) that determines use of project lands as a Permittee.

Response: The Plan has been updated to clarify the relationship between OCTA and Caltrans for the Covered Activities. OCTA will be the sole Permittee receiving permits from the Wildlife Agencies. The California Department of Transportation (Caltrans), as the owner and operator of the state highway system, will be included as a Participating Special Entity (see description of Caltrans in Section 8.2, "Roles and Responsibilities"). Caltrans will usually be the Construction Lead and in those situations OCTA will issue a project-specific Certificate of Inclusion that will describe the authorized take and required avoidance and minimization measures as set forth in the Plan. The avoidance and minimization measures associated with the Plan's Wildlife Crossing Policy state that if there is an existing wildlife crossing within the areas of covered freeway improvement project deemed to be an important crossing for wildlife movement, the resulting changes to the existing freeway will be designed to maintain or improve functionality of the existing wildlife crossing. The policy does not trigger additional conditions for enforcement on Caltrans lands that are not already in place. As such, successful implementation of the Plan's Conservation Strategy does not require that Caltrans participate as a permittee. No further changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-10 Response

Comment: The commenter states that the Plan fails to provide for an adaptive management and monitoring program (including collecting covariate data) appropriate for management of species, vegetation communities and ecosystem processes at a scale that is appropriate for the proposed Covered Species.

Response: See Master Response 19-B and 19-C. In regards to regional conservation efforts and the collection of covariate data, to date, the only coordinated regional monitoring effort has been for the coastal California gnatcatcher in 2015. OCTA participated in this effort. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-11 Response

Comment: The commenter states that the Plan does not address the primary threats and stressors to the continued persistence of Covered Species.

Response: Refer to Response 19-2 and Master Response 19-F. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-12 Response

Comment: The commenter states that the Plan relies heavily on species distribution modeling to identify how the conservation measures and project will benefit/impact Covered Species.

Response: Refer to Master Response 19-E. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-13 Response

Comment: The commenter states that the mountain lion expert-based modeling was inadequate for this species and a more recent model can be used.

Response: The mountain lion model has been corrected in the Final Plan to reflect that the San Joaquin Hills is not potential suitable habitat for mountain lion. Refer to Master Responses 19-E and 19-F. No further changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-14 Response

Comment: The commenter states that the cactus wren expert-based modeling was inadequate for this species and a more recent model can be used.

Response: Refer to Master Responses 19-E and 19-F. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-15 Response

Comment: The commenter states that the western pond turtle expert-based modeling was inadequate for this species and more recent data is available.

Response: Refer to Master Responses 19-E and 19-F. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-16 Response

Comment: The commenter states that the adaptive management plan should address conservation of the species across the entire Plan Area.

Response: Refer to Master Response 19-C. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-17 Response

Comment: The commenter states that the OCTA Preserves do not maintain the integrity of large habitat blocks on their own.

Response: Refer to Master Response 19-C. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-18 Response

Comment: The commenter states that the OCTA conservation strategy does not include a commitment to secure the linkage areas included in the CBI Conservation Assessment.

Response: As the commenter notes, four critical existing or potential viable linkages for wildlife movement were identified within the Plan Area that include both protected and unprotected natural lands (CBI 2009); however, urban development hinders actual use by many wildlife species. Acquisition opportunities in these linkages were limited but OCTA is/has funding/funded restoration of key areas within three of the linkages including Coal Canyon, Trabuco Creek, and San Juan Creek, in an effort to improve biological function and potential use by wildlife. Enhancement of these linkages helps to maintain connectivity within the Plan Area and to adjacent habitat areas outside the Plan Area. Refer to Master Response 19-C. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-19 Response

Comment: The commenter states that the OCTA conservation strategy does not maintain habitat areas large enough to support populations of all Covered Species in Orange County and that it lacks the funding flexibility to help accomplish restoration of the needed connectivity.

Response: Refer to Master Response 19-C. OCTA's conservation strategy includes the enhancement of certain wildlife corridors (e.g., North Coal Canyon) and the long-term conservation of other wildlife corridors (e.g., Ferber Ranch) by developing conservation goals that complement existing conservation efforts already ongoing in the Plan Area. This in turn, improves wildlife connectivity to areas outside the Plan Area (i.e., within the Region). Also, OCTA has been coordinating on a more Regional level with other organizations for the monitoring of Covered Species. Having said that, OCTA's Plan has to focus on conservation actions that are directly related to the needs of the M2 freeway program. Pursuant to the M2 ordinance, allocation of these funds must be tied back to the M2 freeway projects. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-20 Response

Comment: The commenter states the Plan does not specify and support how the conservation strategy achieves conservation across environmental gradients.

Response: Section 6.2, "Landscape-Level Conservation Analysis", of the Plan (see Table 6.2) summarizes how the OCTA conservation strategy results in conservation across environmental gradients. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-21 Response

Comment: The commenter states the Plan does not have a connectivity objective and the Plan's monitoring program is inadequate to address effective movement and interchange of organisms between habitat areas, particularly in the context of all of Orange County (Plan Area).

Response: The Plan includes landscape-level objectives addressing connectivity (Landscape Objectives 2.1 and 2.2). Refer to Master Response 19-C. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-22 Response

Comment: The commenter states the Plan does not identify specific restrictions or triggers for when the restrictions are applied within Preserves.

Response: A Resource Management Plan (RMP) will be prepared for each Preserve. Currently, draft RMPs have been prepared for Ferber Ranch, Hafen, O'Neill Oaks, Saddle Creek South, and MacPherson. While not mandatory, these management plans were circulated for a 90-day public comment period beginning in November 2015. The two remaining plans will be drafted within two years of signing the Implementing Agreement. All of the RMPs include or will include a public access management component that defines restrictions and appropriate levels of trail use and other passive recreation within the Preserves and methods to enforce these restrictions. The remaining RMPs will be circulated for public review and will also be reviewed and approved by the Wildlife Agencies. All of the RMPs will be reviewed and updated every five years (see Section 7.2.4 of the Plan). No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-23 Response

Comment: The commenter states that the Plan does not utilize the best available scientific information for most of the proposed Covered Species.

Response: See Master Response 19-A. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-24 Response

Comment: The commenter states that the Plan's monitoring program does not address decision making for the Plan Area and is not integrated with the monitoring of the Central/Coastal NCCP.

Response: Refer to Master Responses 19-B and 19-C. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-25 Response

Comment: The commenter states that the adaptive management program as describe in the Plan does not address decision making for the Plan Area and at a regional scale.

Response: See Master Responses 19-C and 19-D. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-26 Response

Comment: The commenter states that using a PAR or PAR-like process to determine funding requirements is inadequate.

Response: A PAR or PAR-like analysis is a standard method used to estimate the financial needs of long-term management and is accepted by many regulatory agencies including both CDFW and the U.S. Fish and Wildlife Service. In addition, OCTA has set forth an approach for determining the endowment funding that is expected to use additional years of interim habitat management, which will provide a database and sounder basis for estimating the cost of long-term management. See Section 8.3, “Plan Funding” of the Plan. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-27 Response

Comment: The commenter states that the Implementing Agreement for the Plan is an appendix, which are not generally reviewed and commented on by the public. The commenter also states that the IA should be provide regulatory assurances for all proposed Covered Species for the full 40 year term of the permit.

Response: The Implementing Agreement was circulated for review as part of the draft EIR/EIS and we consider this an appropriate forum to solicit public comment.

Permit terms are typically defined by the timeframe expected to complete the Covered Activities. However, the Preserve adaptive management and monitoring is required to continue in-perpetuity. As such, a non-wasting endowment is required to be established to ensure the “in-perpetuity” requirement. Please refer to Master Response 19-C regarding the design of the Conservation Strategy and the conservation efforts OCTA has committed to through the M2 program to benefit the Covered Species by conserving high quality habitats and enhancing habitat areas known to support the Covered Species. The extent and duration of regulatory assurances proposed for the Plan is consistent with the criteria in section 2820(f)(1)(A)-(H), including the Plan’s use of best available science, adequacy of the analysis, use of sufficient mechanisms to assure long-term funding, and use of adaptive management responses to foreseeable circumstances. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-28 Response

Comment: The commenter states that the Plan makes no provision for making data available to the public.

Response: The Plan identifies BIOS and CNDDDB as examples of potential data repositories that could be used (see Section 7.2.7.4, “Monitoring Guidelines”, of the Plan). OCTA will coordinate with the Wildlife Agencies and other regional conservation entities to determine an appropriate regional data repository. The USGS SCMTX is an option that could be considered. Much of the data collected on the Preserves will be provided to the public in the Annual Report. The Annual Report will be made available on the OCTA website: [http://www.octa.net/Projects-and-Programs/Measure-M/Measure-M2-\(2011-2041\)/Freeway-Mitigation/Environmental-Mitigation-Program-Overview/](http://www.octa.net/Projects-and-Programs/Measure-M/Measure-M2-(2011-2041)/Freeway-Mitigation/Environmental-Mitigation-Program-Overview/). No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-29 Response

Comment: The commenter states that the Implementing Agreement proposes to provide assurances for the Covered Species for the 40 year term but the Plan does not support that assurance.

Response: Refer to Response 19-27. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-30 Response

Comment: The commenter states that many of the proposed Covered Species are experiencing an on-going decline and references the Orange County mountain lion population in relation to assurances.

Response: Refer to Master Responses 19-C and 19-F. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-31 Response

Comment: The commenter states that the Plan does not utilize the best scientific information available for the analysis of the impact of take on Covered Species.

Response: Refer to Master Responses 19-A and 19-F. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-32 Response

Comment: The commenter states that the Plan does not utilize the best scientific information available to make assessments about the impacts of take, the reliability of mitigation strategies, and the appropriateness of monitoring techniques.

Response: Refer to Master Responses 19-A and 19-F. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-33 Response

Comment: The commenter states that the proposed location for centralized data is inadequate.

Response: Refer to Response 19-28. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-34 Response

Comment: The commenter states that the fire return interval trigger included in the Changed Circumstances section of the Plan is inadequate and not based on the best available science.

Response: According to the Calfire fire perimeter data, the distribution and frequency of fires has varied across the Plan Area. The Calfire data was reviewed for each of the OCTA Preserves and was included in the baseline technical reports as Appendix C.6 of the Plan.

The specific triggers included in Section 8.6.2 of the Plan, "Changed Circumstances", was based on multiple factors. These included the past fire history on each of the Preserves, fire history across the

Plan Area, and input from the Wildlife Agencies whom coordinate with entities managing preserves throughout Orange County.

Comment 19-35 Response

Comment: The commenter reiterates that the NCCP does not utilize the best available scientific information.

Response: Refer to Master Responses 19-A and 19-F. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-36 Response

Comment: The commenter asks for clarification of the purpose of the monitoring and how the monitoring protocols in Table 7-1 of the Plan are intended to answer these questions.

Response: As described in Section 7.2.7.4 of the Plan, “Monitoring Guidelines”, the monitoring protocols define minimum monitoring requirements for the effectiveness monitoring to assess status and trends, as well as threats and stressors. The effectiveness monitoring data will be compared with data collected during the baseline surveys and OCTA will ensure that the data collection methods are consistent across these efforts. These methods may be adjusted over time as new information on Covered Species becomes available or through the adaptive management program. OCTA will coordinate regularly with the Wildlife Agencies and other land managers in the region (e.g., IRC, Audubon) to ensure that the most current, established methods are being used. The OCTA Preserve Managers and Monitoring Biologists, in consultation with the Wildlife Agencies and other species experts, will review and suggest the most appropriate monitoring method(s) to address resource-specific management questions identified in the RMPs.

In addition to effectiveness monitoring, targeted monitoring will be implemented on the Preserves (defined in more detail within each RMP). Targeted monitoring is used to answer specific management questions (hypotheses) and determine the effect of management actions on natural communities and the Covered Species. Targeted monitoring necessary to address site-specific threats to Covered Species and habitats on the Preserves will be identified and prioritized as part of the development of individual Preserve RMPs or through subsequent stewardship or effectiveness monitoring. The adaptive management goals and objectives (see Section 7.2.8 of the Plan, “Summary of Adaptive Management Actions for Covered Resources”) provides guidance as to how individual RMPs will define targeted monitoring requirements, including collection of covariate data.

Lastly, the commenter’s input on monitoring suggests that OCTA should collect and analyze information for regional monitoring to address species issues across the Plan Area. Please refer to Master Responses 19-B,19-C and 19-D. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-37 Response

Comment: The commenter states concerns pertaining to the Plan’s Wildlife Crossing Policy.

Response: The Wildlife Crossing Policy (see Section 5.6.2.3 of the Plan) has been modified in the Final Plan. Updates to this Policy include clarification on how wildlife crossings will be evaluated for wildlife use, what is considered an important corridor, how a determination is made if a project

might substantially alter the function of an existing crossing, and the required coordination with the Wildlife Agencies during all phases of the project including pre-planning and construction. The Wildlife Crossing Policy was developed to ensure that existing structures that allow wildlife movement continue to function at baseline or better conditions. OCTA and Caltrans, in collaboration with the Wildlife Agencies, and as part of the environmental review of a covered freeway improvement project will determine whether there is an important wildlife crossing that could be impacted as a result of project implementation. If necessary, OCTA will prepare a technical report summarizing the results and design recommendations for the wildlife crossing and receive Wildlife Agency approval prior to final design. This policy is consistent with other avoidance and minimization measures identified, reviewed, and included in project design for freeway improvement projects. No further changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-38 Response

Comment: The commenter states that the Plan commits to not increasing wildlife road mortality. This is not correct for the Plan Area.

Response: As stated in Section 4.2.1.2 of the Plan, “Indirect Effects”, OCTA recognizes that the addition of lanes and other road improvements will result in wider roadways and increases in traffic volumes that may contribute to slight increases in the existing level of vehicular-caused mortality of wildlife. The Plan includes biological goals and objectives (see Landscape Goal 2, Landscape Objectives 2.1, 2.2, 2.3) focused on the protection and enhancement of natural and semi-natural landscapes important to maintain wildlife movement in the Plan Area. The Plan conservation strategy achieves these objectives by (1) strategically acquiring Preserves adjacent to existing protected open space that provide opportunities for wildlife movement across the regional landscape; (2) funding of restoration projects that include specific design features to promote wildlife movement and reduce vehicular mortality on wildlife (North Coal Canyon and West Loma projects) and include habitat restoration within areas identifying as important for regional movement corridors (Big Bend, Aliso Creek, City Parcel); and (3) set forth avoidance and minimization policies (the Wildlife Crossing Policy) that commits to making sure existing structures that are determined to function as important wildlife crossings maintain or improve their functionality as a result of the covered freeway improvement projects. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-39 Response

Comment: The commenter states that the conservation analysis tables are flawed in regards to supporting the determination as to whether the Plan provides for the conservation of species.

Response: The tables included in Section 6.4 of the Plan, “Species-Level Conservation Analysis” compare conservation targets with the amount of conservation achieved under the OCTA conservation strategy. As stated in the Plan’s Executive Summary, the conservation targets were based on the type and level of take associated with the Covered Activities. These targets were then used to guide the development of the conservation strategy and serve as a benchmark for the Plan’s conservation requirements. The targets represent an estimate of the amount of conservation to offset the direct and indirect effects from Covered Activities. The quantifiable analysis is only one component of the conservation analysis.

The commenter reiterated that the Plan needs to provide for conservation of the Covered Species in the Plan Area. Refer to Master Response 19-C. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-40 Response

Comment: The commenter questioned mountain lion occurrence in Chino Hills.

Response: Refer to Master Response 19-F. In addition, while there are not recent data of collared lions using Chino Hills, there are records of historic sightings of non-collared lions within the area. Non-collared lions have also been seen as recently as 2016 within Telegraph Canyon and in and around other portions of Chino Hills State Park. These sightings have been reported and verified by park staff with warnings issued to park visitors and the surrounding community. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-41 Response

Comment: The commenter states that Table C.7.1 was very misleading.

Response: The information in Appendix C.7 of the Plan could not be obtained by OCTA in an electronic/ GIS format due to limitations of proprietary data. Therefore the commenter is correct that it is unclear if the data represents one individual at multiple locations through time or multiple occurrences (i.e., different individuals). Because of this uncertainty, the information was included as an appendix only to provide additional documented species occurrence information for the Plan Area that may not be included in the CNDDDB dataset. Since this data was considered a snapshot in time (i.e., presence/absence data), it was not included in the Conservation Analysis calculations provided in Chapter 6 of the Plan or on any of the other figures in the Plan, but used in a qualitative manner. In the Final Plan, the introduction to Appendix C.7 has been edited to clarify the use and interpretation of this dataset by OCTA. No further changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment 19-42 Response

Comment: The commenter recommends that OCTA should establish an independent committee consisting of experts to provide on-going direction.

Response: OCTA has an established Environmental Oversight Committee (EOC) to oversee and guide the administration of the M2 Environmental Mitigation Program (EMP) that provides funding for programmatic mitigation to offset impacts from the freeway projects. The EOC is made up of two OCTA Board members and representatives from Caltrans, the Wildlife Agencies, U.S. Army Corps of Engineers, environmental groups, and the public. The EOC will continue to serve as the advising entity, and public forum for decisions and recommendations regarding the M2 EMP. The NCCP/HCP Administrator will report regularly to the EOC regarding status of the freeway projects, restoration projects, Preserve management, as well as EMP funding. The EOC will address ad hoc NCCP/HCP issues as needed and will provide recommendations to the OCTA Board. OCTA considers the EOC the only committee necessary to assist OCTA in Plan implementation. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

Comment Letter 20: Sandra Jacobson – 2/6/15

This letter is respectfully submitted in response to call for public comments on the Orange County Transportation Authority (OCTA) draft Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) of September 2014. Comment dated February 6, 2015.

Comments Form Information:

Sandra Jacobson
810 Emerald Street
San Diego CA 92109
858 414-1518
jacobsonsandra@att.net

Comment:

A Case for Steelhead Inclusion in the OCTA NCCP/HCP

20-1

The Orange County Transportation Authority (OCTA) draft Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) is intended to provide a framework to protect and enhance natural resources in Orange County while streamlining environmental permitting process from California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (FWS) for impacts of incidental take on sensitive, threatened and endangered species and their habitats. The need for the Proposed Plan is based on the possibility that OCTA freeway improvement projects through the M2 transportation sales tax measure may result in incidental take of Covered Species. The Plan is also intended to offset project-related impact on threatened and endangered species and their habitat by directing M2 revenue to fund restoration projects for species covered by the HCP and thus protecting and enhancing integrity, as well as ecological diversity and function in Orange County. This comment is to advocate for inclusion of steelhead as a Covered Species in the OCTA NCCP/HCP. Inclusion of Southern California steelhead in the HCP will acknowledge a) OCTA responsibility under the Southern California steelhead ESA listing for compliance in promoting steelhead recovery, b) the historical presence of steelhead in Orange County rivers and streams, c) recent molecular genetic evidence supported by extensive field collection efforts demonstrating that few native rainbow trout populations of coastal steelhead descent exist in Southern California and are therefore on the brink of extinction, and d) the fact that organizations are mobilized and willing to complete steelhead recovery projects in accordance with the federal National Marine Fisheries Service (NMFS) Southern California Steelhead Recovery Plan (2012).

Steelhead Life Cycle and Limiting Factors for Endangered Species Recovery

Trout of the species *Oncorhynchus mykiss*, commonly known as rainbow trout or steelhead, historically populated coastal streams and the ocean throughout California. While both forms reproduce in fresh water, steelhead migrate between the ocean and fresh water while resident rainbow trout live entirely in fresh water. Because steelhead spend part of their life cycle in the ocean, they are anadromous. The sharp decline in Southern California Steelhead populations in the mid-1900s led to the federal listing under the Endangered Species Act (ESA) of the Southern California Coast steelhead in 1997 from the Santa Maria River at the north end to Malibu Creek at the south end. Following steelhead sightings and

20-1
(cont.)

genetic documentation in watersheds south of Malibu Creek, the geographic boundary was extended southward to the U.S.-Mexico border in 2002, including Orange County. The listing status of this expanded region was reaffirmed in 2006.

Limiting factors to endangered steelhead recovery are tightly linked to features of their life history as an anadromous species. Steelhead live in freshwater as juveniles for at least one year before migrating to the ocean where they feed and grow for several months to years before returning to freshwater to spawn. Some fish only enter the estuary or briefly enter saltwater before moving back up to tributary habitat. Many steelhead survive the first spawning run, return to the ocean and repeat the migration cycle to fresh water in future years. They require passage up and down the main stem of a river, normally during periods of winter high water flow, and need sites with appropriate gravel for spawning and year-round refuge areas for rearing. Populations of steelhead without migratory access to and from the ocean can adopt a resident life-history, and even after generations in fresh water can produce progeny that adopt steelhead characteristics. Urbanization and dam construction in Southern California have inhibited ocean migration of the endangered Southern California steelhead that historically populated these rivers. Low water flow, poor water quality and degraded in-stream habitat are further threats to steelhead survival.

HCP Treatment of Anadromous Species and NMFS Jurisdiction

In the HCP, anadromous fishes are defined as “fish that spend part of their life cycle in the ocean and part in fresh water.” It further states that “NMFS has jurisdiction over anadromous fish that spend the majority of their life cycle in the ocean.” However, due to the fact that there is not sufficient data on Southern California steelhead to conclude what percentage of their time they spend in the ocean, it is not justifiable to assign exclusive jurisdiction to NMFS throughout entire watersheds of Orange County, thereby excluding steelhead from being a Covered Species in the HCP. This essentially misrepresents their life cycle capabilities here and precludes M2 revenue from being directed towards much needed steelhead recovery projects. Although this current framing of Covered Species in the HCP affords steelhead an additional level of protection by subjecting road projects to potentially lengthy and detailed section 7 consultations with NMFS, it deals a significant blow to long-term persistence of steelhead and the timeliness of steelhead recovery efforts in Orange County.

The NMFS Southern California Steelhead Recovery Plan outlines recovery objectives and designates high priority watersheds to “prevent the extinction of Southern California steelhead in the wild and ensure the long-term persistence of viable, self-sustaining, harvestable, interacting wild populations of steelhead distributed across the DPS.” Four highest priority waterways for steelhead recovery efforts designated in the NMFS Plan are completely or partially within Orange County. They are San Juan Creek, Trabuco Creek, San Mateo Creek and the Santa Ana River.

Two Examples of Orange County Watersheds With Steelhead Habitat and Historical Presence

The San Juan Creek Watershed is located within primarily within Orange County and covers 178 square miles and has a stream length of 280 miles (Wilkinson 2002, San Juan Creek Watershed Workplan 2013). San Juan Creek historically supported steelhead (Becker 2010) and steelhead sightings have been

20-1
(cont.)

documented in lower San Juan Creek near the ocean since 2000 (CDM 2007). Surveys by various agencies through the years indicate that the upper San Juan watershed, including Trabuco Creek, has suitable spawning and rearing habitat and appears capable of supporting steelhead.

One of the major impediments to steelhead recovery in the San Juan Creek watershed is the presence of fish passage barriers near the ocean: at the Metrolink railroad crossing and the Interstate 5 road crossing. The Metrolink barrier is currently under remediation, led by the Trout Unlimited – South Coast Chapter in collaboration with environmental consultants (Katagi 2014). The upper watershed has desirable trout habitat and is largely open space in Cleveland National Forest, regional parks and preserves. However, additional check dam barriers in San Juan Creek, Trabuco Creek and Silverado Canyon (USDA 2011) block upstream access and should be removed concurrently with downstream barriers.

San Mateo Creek is just south of San Juan watershed and is considered an anchor watershed for steelhead recovery (Becker 2010). Five main factors that work in favor of re-establishing a steelhead stronghold in San Mateo Creek are that it is undammed, does not have full fish passage barriers in the main stem until Tenaja Falls, has suitable rearing and spawning habitat relatively close to the ocean, comprises designated critical habitat for steelhead, and is home to seven threatened and endangered species. San Mateo Creek was historically an important steelhead fishery but in 1991, the population was declared extirpated (US FWS 1998; Becker 2010). However, with steelhead sightings and documentation in recent years (CDFG 2004, CDFG 2000) and the passage of Prop 12 in 2000, renewed efforts are in place to increase steelhead population in San Mateo Creek.

The San Mateo Creek watershed is approximately 139 square miles and lies within Orange County, Riverside County, and San Diego County. San Mateo Creek is over 22 miles long, runs in a southwesterly direction to the Pacific Ocean just south of San Clemente, and has four main tributaries: Cristianitos Creek, Talega Creek, Tenaja Creek, and Devil Canyon Creek (San Mateo Creek Conservancy 2001). Devil Canyon Creek was specified in the San Mateo Creek Conservation Plan (2007) for steelhead population reintroduction based on historical population data and habitat surveys which showed large pools of sufficient quality to support year-round steelhead growth and gravel for spawning (FWS 1998). A small population of about 70 southern steelhead trout was identified in San Mateo Creek and Devil Canyon Creek (Hovey, 2004), whose numbers declined starting in 1999. Analysis of an adult individual collected in Devil Canyon Creek in 2002 confirmed that maturing, second generation trout occupied the tributary although in small numbers. These observations factored into the extension of the ESU south of Malibu Creek (Dept of Commerce 50 CFR, 2000) and the assertion that there was uninterrupted trout presence in the drainage from spring of 1997 to Dec 2003 (CDFW and USMC, 2000; Becker and Reining 2008).

Four Reasons To Include Steelhead in the OCTA NCCP/HCP

First, OCTA has responsibilities under the ESA listing for compliance on promoting steelhead recovery. The presence of long standing dam structures and more recent roadway structure barriers to ocean migration and other habitat characteristics increases the challenges of maintaining long-term viability of steelhead populations. Solutions to these problems through OCTA projects will get increasingly

20-1
(cont.)

expensive the longer they are put off. The range of challenges that trout encounter in urbanized Southern California watersheds includes: population fragmentation, physical migration barriers, suitable spawning and rearing habitat, lack of connectivity due to low water flow, and poor water quality. A major improvement to steelhead migration will result from removal of fish passage barriers such as the Metrolink and Interstate 5 structures that are total barriers to migration (Sutherland 2013). On a broader level, steelhead habitat enhancement is beneficial generally to Orange County riparian areas that host multiple sensitive species (Smith 2000).

Second, there were historically steelhead present in Orange County streams and rivers. There continue to be sightings of steelhead transiently entering Orange County waterways, although their persistence is inhibited by urbanization and dam construction that block steelhead ocean migration into freshwater rearing areas. As a result, many *O. mykiss* populations are isolated in freshwater streams often near remote headwaters of their native basins, and have adopted a completely resident life history as rainbow trout. A recently completed large scale genetic study of Southern California rainbow trout showed that populations of native coastal steelhead descent were still present in the most southern counties of Southern California (Jacobson et al 2014). This study further provided evidence that habitat conditions are indeed sufficient in Orange, San Diego and Riverside County watersheds to support trout.

Third, there are few native rainbow trout populations left in extreme Southern California. Because these trout populations are rare genetic resources and hold promise for improving genetic diversity and fitness of fragmented native rainbow populations, it is important to protect them. Given the impact of severe environmental conditions such as drought, fire, and urbanization that threaten to wipe out these populations, recovery measures are time sensitive. One of the known native rainbow trout population of coastal steelhead descent is in a tributary of the Santa Ana River north of upper Trabuco Creek (Jacobson et al 2014). The documentation of a pure native rainbow trout population here will likely spur further implementation of appropriate conservation measures for this area, and evaluation of neighboring streams for native rainbow trout.

Fourth, organizations are currently mobilized and active in Orange County and regionally to promote steelhead recovery through implementation of the Federal Southern Steelhead Recovery Plan (2012). There are willing and active partners in watershed restoration. For example, the Trout Unlimited – South Coast chapter has been active for over a decade in Orange County and has pursued fish passage barrier remediation, habitat improvement and public education. As an active member of non-profit organizations dedicated to fisheries conservation, and as a scientist committed to environmental sustainability, I see that there are numerous cooperative efforts that can effectively combine federal, state, tribal, regional and non-governmental capabilities with programmatic financial support to successfully meet the challenges inherent in recovery of the endangered Southern California steelhead.

Sincerely,

Sandra Jacobson, Ph.D.
San Diego, California
February 6, 2015

References:

Becker, G.S., Smetak, K.M. and D.A. Asbury (2010). Southern Steelhead Resources Evaluation: Identifying Promising Locations for Steelhead Restoration in Watersheds South of the Golden Gate. Center for Ecosystem Management and Restoration. Oakland, CA.

Becker, G.S. and I.J. Reining (2008) Steelhead/Rainbow Trout (*Oncorhynchus mykiss*) Resources South of the Golden Gate, California. Center for Ecosystem Management & Restoration. Prepared for California State Coastal Conservancy and The Resources Legacy Fund Foundation.

California Department of Fish and Game (2000) Steelhead Rainbow Trout in San Mateo Creek.

California Dept of Fish and Game and U.S. Marine Corps (2003) San Mateo Creek Survey. Participants: Tim Hovey and Jenny O'Brien (CDFG) and Walt Wilson (USMC).

California Department of Fish and Game (2004) Current Status of Southern Steelhead/Rainbow Trout in San Mateo Creek, California. Report by Tim Hovey 90(3) 140-154.

CDM (2007) San Juan and Trabuco Creeks Steelhead Recovery Watershed Management Plan Prepared by Trout Unlimited – South Coast Chapter and CDM. Prepared for California Department of Fish and Game.

Conservation Strategy and Plan for Southern Steelhead Restoration in San Mateo Creek Watershed (2007) Trout Unlimited – South Coast and Don Duff, with San Mateo Creek Project Technical Advisory Committee and State Coastal Conservancy.

Dept of Commerce; National Oceanic and Atmospheric Administration (2000) Endangered and Threatened Species: Proposed Range Extension for Endangered Steelhead in Southern California. Federal Register 50 CFR Part 224; Vol 65 No 244.

Jacobson, S., Marshall, J., Dalrymple, D., Kawasaki, F., Pearse, D., Abadia-Cardoso, A. and J.C. Garza (2014) Genetic Analysis of Trout (*Oncorhynchus mykiss*) in Southern California Coastal Rivers and Streams. Final Report for California Department of Fish and Wildlife. Fisheries Restoration Grant Program: Grant Agreement No. P0950015.

Katagi, W. and T. Johnson (2014) Physical Hydraulic Modeling Tools for Restoration of Endangered Southern Steelhead Habitat. Presentation at Conference on Ecological and Ecosystem Restoration, New Orleans LA. July 29, 2014.

National Marine Fisheries Service (2012) Southern California Steelhead Recovery Plan. Southwest Region, Protected Resources Division, Long Beach, California.

San Juan Creek Watershed Workplan (2013) Cities of Dana Point, Laguna Hills, Laguna Niguel, Mission Viejo, Rancho Santa Margarita, and San Juan Capistrano, The County of Orange, and the Orange County

Flood Control District.

San Mateo Creek Conservancy (2001) San Mateo Creek Watershed Profile. Prepared for the California State Coastal Conservancy.

Smith, R.D. (2000). Assessment of Riparian Ecosystem Integrity in the San Juan/San Mateo Watershed, Orange County, California. U.S. Army Engineer Research and Development Center, Waterways Experiment Station, Vicksburg, MS. Final Report to the U.S. Army Corps of Engineers, Los Angeles District.

Sutherland, G. (2013) Trabuco Fishways at I-5 and Metrolink: Moving Forward. Prepared by Trout Unlimited – South Coast Chapter for San Juan City Council Meeting.

U.S. Fish and Wildlife Service (1998) Southern Steelhead *Oncorhynchus mykiss* habitat suitability survey of the Santa Margarita River, San Mateo and San Onofre creeks on Marine Corps Base, Camp Pendleton. United States Fish and Wildlife Service; Coastal California Fish and Wildlife Office, Arcata, CA. Prepared by Lang, J.S., Oppenheim, B.F. and R.N. Knight for Assistant Chief of Staff, Environmental Security.

USDA Forest Service Environmental Assessment (2011) Trabuco Aquatic Organism Passage Restoration. Prepared by Kirsten Winter. Prepared for the Trabuco Ranger District, Cleveland National Forest, Orange and Riverside Counties, California.

Wilcox, J.M. (2012) Assessment of Southern California Steelhead Trout on the Cleveland National Forest. Prepared for Cleveland National Forest.

Wilkinson, M. (2002) San Juan Creek Watershed Management Study: Orange County, California F-5 Report. Prepared by the Army Corps of Engineers, Los Angeles District. Prepared for Orange County.

Response to Comment Letter 20: Sandra Jacobson – 2/6/15

Comment 20-1 Response

Comment: The commenter request Steelhead be included as Covered Species under the Plan.

Response: OCTA appreciates the comment and insights provided on Steelhead in Orange County. OCTA, in coordination with the Wildlife Agencies, completed a systematic process to identify special-status plant and animal species that are likely to occur within the Plan Area and that should be considered for coverage under the M2 NCCP/HCP. This process is describe in Appendix C.4 of the Plan. Steelhead was not a species listed in the original Planning Agreement. The potential for the covered freeway improvement projects to adversely affect Steelhead and the feasibility of conserving the species were primary factors for not including Steelhead as a species under the M2 NCCP/HCP. No changes to the Plan or Final EIR/EIS are warranted based on this comment.

9.2.4 Trails/Public Access Comments

Master Response to Comments Related to Public Access and Recreation on Preserves

OCTA appreciates the interest and feedback provided on M2 NCCP/HCP EIR/EIS and Plan. There were a number of comments related to public access and recreational trails as they pertain to the Preserves OCTA has acquired as part of the OCTA M2 NCCP/HCP (Plan). The following are Master Responses that addresses three broad themes related to public access and recreational trails:

- A. How M2 NCCP/HCP Plan Addresses Public Access and Recreation
- B. Measure M2 (M2) Environmental Mitigation Program Guiding Principles for Defining Public Access Plan on Preserves
- C. Regional Trails Planning

Master Response A: How M2 NCCP/HCP Plan Addresses Public Access and Recreation

The OCTA M2 NCCP/HCP (Plan) addresses public access and recreation in a number of sections of the Plan including:

- Executive Summary (page ES-4) – commitment to include public access on some Preserves is consistent with biological goals and objectives.
- Section 3.2.1 – Compatible Uses within the NCCP/HCP Preserves – Recreation
- Section 4.2.2 – Covered Activities within Preserves
- Chapter 7 – Management and Monitoring
 - Section 7.2.5.5 – Land Uses within Preserves
 - Section 7.2.5.7 – Recreation
 - Section 7.2.5.8 – Enforcement of Public Access
 - Section 7.2.7 – Adaptive Management and Monitoring of the Preserves

The following is a synopsis of how the Plan addresses public access and recreation:

Commitment to Providing Public Access

OCTA recognizes the importance of public access on the Preserves and has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As discussed in the Plan, public access will be provided on some of the Preserves if access is consistent with the Plan's biological goals and objectives. The primary purpose of acquiring the Preserves is to meet the biological requirements of the NCCP/HCP. This includes preservation of natural communities and/or plant and animal species that are tied to those that may be affected by the implementation of the M2 freeway projects. However, one of the M2 Environmental Mitigation Program's objectives is to provide co-benefits, such as passive recreational opportunities where they complement the protection of biological resources. Permitted

activities within the Preserves should generally occur during daytime hours for the safety of those who are accessing the Preserves; to minimize impacts to the fauna; and through a docent-led (or similar) program. In addition, only activities which are compatible with the protection of the Covered Species and natural communities will be permissible. The location, type, seasonal timing, and frequency of activities in the Preserves can all be modified to reduce or eliminate impacts and stressors to biological resources.

As mentioned above, there are specific chapters and sections of the NCCP/HCP that relate to recreation and public access to the Preserves. Specifically, recreational access is discussed in Chapter 7, "Management and Monitoring". As stated in Section 7.2.5.7, passive recreational use in the Preserves will be managed to accommodate the diversity of compatible recreational uses but must first and foremost be consistent with the protection and enhancement of biological resources. Passive recreation includes activities such as walking, jogging, hiking, bird watching, non-competitive mountain biking, equestrian use, and limited picnicking. Existing recreational facilities should be managed to promote the maintenance of habitat value surrounding these facilities. Passive recreation will be allowed within some of the Preserves but will be managed and directed away from the more sensitive biological resources.

Shortly after OCTA purchased the Preserves, limited and managed access tours were initiated on some of the Preserves. In spring 2011, a commemoration event celebrating OCTA's first conservation property acquisition was held on the Saddle Creek South Preserve. In 2012, OCTA partnered with the Transportation Corridor Agencies (TCA) to present a tour of Saddle Creek South which included the adjoining TCA property located at Live Oak Canyon. In 2013, the Ferber Ranch Preserve was showcased during a hike and equestrian ride wilderness day event. Additional hike and ride events took place on the Ferber Ranch Preserve during 2014 and 2015. In 2016, OCTA has significantly increased the frequency of the hike and equestrian ride events. The increased frequency will enable OCTA to gauge whether access events should be adjusted going forward, in order to protect and maintain the biological resources.

As part of the Plan, Preserve-specific Resource Management Plans (RMPs) are required to be prepared to address biological monitoring requirements, management needs, and appropriate access. RMPs are typically required to be prepared by the Wildlife Agencies once the Plan has been approved. These RMPs do not require an official public review process. However, since there is a high degree of public interest pertaining to recreational access, OCTA elected to prepare draft RMPs for a number of the Preserves before the Plan was finalized and also afforded the public an opportunity for input. Draft RMPs for the following Preserves were released for a 90-day public review period between November 2015 and February 2016: Ferber Ranch, Hafen, O'Neill Oaks, Saddle Creek South, and MacPherson. Three open house meetings were held the public review period of the RMPs. Approximately 50 comments were received within this public review period. In general, these comments showed support of the draft RMPs as well as focused on the amount of recreational access opportunities within the Preserves. Shortly after the NCCP/HCP and EIR/EIS are finalized, OCTA will finalize the RMPs and respond to the public comments accordingly. The draft RMPs for the Hayashi and Aliso Canyon Preserves are anticipated to be available for public input through a similar process in 2017.

The table 9-2 below summarizes the sensitive species, current and proposed future access, and access challenges for each of the five Preserves that OCTA has prepared individual draft RMPs. Note, access on the Preserves is expected to be changed over time based on evaluation of effects on the

biological resources and consultation with the Wildlife Agencies. OCTA, in addition to any future land managers of the OCTA acquired Preserves, will provide public access that is consistent with the NCCP/HCP. Access to the Preserves, as well as management in general, will be reassessed by the land manager(s) and Wildlife Agencies on an as-needed basis and the RMPs will be updated accordingly (a minimum of every five years).

Table 9-2. Proposed Public Access on OCTA Preserves

Preserve	Sensitive Species	Potential Public Access Option(s)	Public Access Challenges
Ferber Ranch	Intermediate Mariposa Lily, Coastal California Gnatcatcher, Cactus Wren, and Orangethroat Whiptail	<p>CURRENT OPTION</p> <ul style="list-style-type: none"> • Docent-led hiking and riding days <p>FUTURE OPTIONS</p> <ul style="list-style-type: none"> • Self-managed community partnership public access program • Permit system (To Be Determined [TBD]) • Open access days • Reduced access 	<ul style="list-style-type: none"> • Surrounded by properties that limit or don't allow public access • Rural roads with limited vehicle capacity • Lack of staging areas (parking/restroom facilities)
Hafen	Intermediate Mariposa Lily, Cactus Wren, and Coastal California Gnatcatcher	No access due to site constraints and safety concerns	<ul style="list-style-type: none"> • Surrounded by properties that limit or do not allow public access • No existing roads on Preserve • Rural roads with limited vehicle capacity • No staging areas (parking/restroom facilities)
O'Neill Oaks	Intermediate Mariposa Lily, Coastal California Gnatcatcher, Cactus Wren and Orangethroat Whiptail	<p>CURRENT OPTION</p> <ul style="list-style-type: none"> • Docent-led hiking and riding days <p>FUTURE OPTIONS</p> <ul style="list-style-type: none"> • Self-managed community partnership access program • Permit system (TBD) • Open access days • Reduced access 	<ul style="list-style-type: none"> • Preserve adjacent to O'Neill Regional Park and private lands that limit or don't allow public access • Separated from O'Neill Regional Park by busy rural roads with blind spots (Trabuco Canyon and Live Oak Canyon roads) • Rural roads with limited vehicle capacity • Lack of staging areas (parking/restroom facilities)

Preserve	Sensitive Species	Potential Public Access Option(s)	Public Access Challenges
Saddle Creek South	Intermediate Mariposa Lily, Cactus Wren, and Coastal California Gnatcatcher	Small scale public event(s) with the cooperation of adjacent land owners for staging	<ul style="list-style-type: none"> Surrounded by properties that limit or do not allow public access Rural roads with limited vehicle capacity Small pull-out area off of busy Live Oak Canyon Road Lack of staging areas (parking/restroom facilities)
MacPherson	Intermediate Mariposa Lily, Coast Horned Lizard, and Orangethroat Whiptail	<p>PROPOSED OPTION</p> <ul style="list-style-type: none"> Coordinate with OC Parks to complement their access program <p>FUTURE OPTIONS</p> <ul style="list-style-type: none"> Docent-led hiking and riding days Self-managed community partnership public access program Permit system (TBD) Open access days Reduced public access 	<ul style="list-style-type: none"> Surrounded by properties that limit or don't allow public access (OCTA must obtain an "entry permit" from the County to access this Preserve) Rural roads with limited vehicle capacity Lack of staging areas (parking/restroom facilities)

With respect to the RMPs' access component, it generally addresses recreational issues and allowable uses within each Preserve. As addressed in the Plan (Section 7.2.5.7, "Recreation"), the following guidelines have been considered for the recreational component of each Preserve's RMP:

- Determine appropriate levels of passive recreational activities within the Preserve, depending on the resources to be protected, season, and successional stage of the vegetation.
- Designate authorized and approved trails as part of the development of RMPs for each Preserve. Align authorized trails with existing access/fire roads. Keep trails away from creeks and jurisdictional wetlands, and minimize creek crossings.
- Prohibit nighttime use of trails.
- Prohibit recreational activities that require construction of new facilities or roads that remove or degrade habitat that are tied to the M2 NCCP/HCP conservation goals.
- Develop design standards for potential trail realignments (i.e. trail loss due to natural conditions) that address the avoidance of sensitive species, unique habitats, wildlife corridors, erosion control, and access to major features.
- Establish a recreational area patrol to monitor/enforce allowed uses in the Preserves.

Passive Uses

- Limit/restrict passive uses in critical wildlife areas during the breeding season, as appropriate.

- Minimize adverse effects of passive recreation, such as trampling vegetation and erosion.
- Provide litter control measures (e.g., closed garbage cans, recycling bins) at access points in each Preserve Area.

Recreational Use

As detailed in Section 7.2.5.7, trails may vary in width and surface material, depending on site-specific factors. Hiking will generally be allowed on all authorized trails. Bicycles will also generally be allowed on all authorized trails except where specifically prohibited. Equestrian use of trails should be limited to existing authorized equestrian trails (not including trails closed for restoration or protection of biological values). Where equestrian and bicycle uses are allowed within the Preserve, the following guidelines will apply:

- Prohibit horses along riparian areas and minimize creek crossings. Allow trails that are away from riparian or other sensitive habitat.
- Mulch trail surfaces to minimize erosion, if necessary, as determined by the Preserve Manager. Do not use materials for trail mulch that are a seed source of invasive exotic species. Prohibit use of eucalyptus chips that could suppress native plant growth adjacent to trails.
- Limit equestrian use to specified trails that are wider than foot trails (minimum of 8 feet wide) to prevent trail edge disturbance, with grades no greater than 25%. If trails become degraded because of heavy use, rotate or limit use during certain seasons to minimize further degradation.
- Restrict or significantly limit development of new corrals, arenas, stables, and other associated equestrian facilities within the Preserve. Locate staging areas for trailheads adjacent to existing roads and away from sensitive biological resource areas and in previously disturbed areas to the maximum extent possible.
- Limit mountain bike trails to areas that are not highly susceptible to erosion and out of riparian and/or wetland areas or other biologically sensitive areas.
- Maintain trails that are wider than foot trails (minimum of 6 feet wide) to prevent trail edge disturbance, with grades no greater than 25%.
- Rotate bike use by closing and rehabilitating trails periodically to prevent trail degradation if a problem develops.
- Construct barriers to restrict access to sensitive areas.
- Discourage competitive mountain bike racing that often involves excessive speed and riding off of trails.

Enforcement of Public Access

The enforcement of Public Access for each Preserve is described in Section 7.2.5.8, "Enforcement of Public Access". Damage caused by unauthorized public access or adjacent land use is one of the greatest threats in Preserves near urban population centers. Without enforcement, it is often difficult to change human behavior, especially in areas that have been used historically for activities that are not compatible with habitat conservation (e.g., off-road vehicle use).

Recognizing the importance of appropriately managing recreational use within the Preserves to protect habitat areas from intrusions, Preserve Managers shall take the following steps to increase

enforcement capabilities and thereby minimize impacts of recreational use on Preserve habitat values:

- Trail user groups shall be encouraged to develop and participate in “self-monitoring and policing” programs to minimize instances of off-trail activities and other abuses to habitat resources within the Preserve.
- As allowed by state and local regulations, Preserve Managers and their staff may be given the authority to issue citations for misuse of trail and other Preserve facilities. Only specific state and county entities are given the authority to issue citations.
- Fines levied for abuse of Preserve facilities resulting in harm to species or sensitive habitat shall be enough to discourage repeat occurrences.
- Repeated offenses by multiple users shall provide the grounds for temporary closure of trail segments and, where necessary, an entire Preserve as a means of avoiding unacceptable adverse impacts on habitats/species within the Preserve. Such temporary closures will also serve to educate users concerning the need to obey Preserve rules and regulations, thereby reducing future recreational impacts on biological resources of the Preserve.

Enforcement of laws and regulations in Preserves falls into two categories of offenses. First are the minor infractions, such as hiking or riding off trail or on a closed trail, bringing a dog into the Preserve, unauthorized equestrian or mountain biking use, and over-watering the adjacent landscape that leads to erosion or degradation on Preserve lands. Minor infractions should be handled by the Preserve Manager through discussion and education of the offending party. Preserve Managers can work together and with local community groups on a public education program to explain goals and regulations as well as educate the public about the area’s resources.

Major infractions would include illegal off-road vehicle use; illegal dumping; repetitive hiking or riding off trail or on closed trails; vandalism, including cutting vegetation or building new trails or bike jumps; illegal encampments (itinerant workers and transients); and excessive repeat offenses of minor infractions. Unfortunately, vandalism is a common occurrence in many Preserves, and fencing and signage are frequent targets of vandals. Involvement of law enforcement officials is necessary to address major infractions.

Enforcement during the interim period will be coordinated through the enforcement authority of adjacent established Preserves, private security, county/city parks, and/or the county sheriff or local police departments.

Ongoing management of public use activities may include the following:

- Maintain effective access control through fencing and signage, regular enforcement patrols, and penalties.
- Develop an educational/outreach program to inform the public and adjacent landowners about allowable uses and activities in and around the Preserve. The program may include distributing brochures in surrounding neighborhoods, working with homeowners associations in the vicinity, developing an informational website, installing educational kiosks, providing outdoor experiences, etc.

- Accommodate scientific research within the Preserve by allowing researchers and students to access the areas. Scientific research projects are subject to approval by the Preserve Manager, who will informally discuss the costs and benefits of the proposed work with the Wildlife Agencies.
- Coordinate with special interest groups and the Wildlife Agencies to encourage volunteer opportunities, such as trash pick-up and weed removal programs that support the goals of this Plan.
- Periodically review access and recreational uses within the Preserves to determine their consistency with the evolving Preserve management policies, practices, and priorities under the adaptive management program.

Master Response B. Measure M2 (M2) freeway Environmental Mitigation Program (EMP) Guiding Principles for Defining Public Access Plan on Preserves

After the M2 NCCP/HCP Plan was released for public review, OCTA received specific comments relating to public access to the Preserves. In order to develop a public access program that took these public comments into consideration, OCTA convened three stakeholder focus group meetings. These focus group meetings resulted in feedback from regional land managers, Preserve neighbors, user groups, and environmental stakeholders.

General principles for public access were drafted that adhered to the M2 EMP objectives and addressed the need to provide complementary access opportunities. A general framework for public access on the OCTA Preserves was established as part of this outreach effort. These general principles and framework are outlined below.

Adhere to M2 EMP Objectives

- a. The M2 freeway projects will potentially impact protected biological resources. State and Federal laws require that impacts on these resources be mitigated. The M2 sales tax includes funding to mitigate for these impacts. In order to provide this mitigation, OCTA is coordinating with the Wildlife Agencies and developing an NCCP/HCP. Undeveloped properties that possess habitat and biological resources that are similar to those potentially affected by the construction of the M2 freeway projects have been purchased and are integrated into the NCCP/HCP¹ as Preserves. These Preserves will remain undeveloped and will be protected in perpetuity.
- b. OCTA Preserves are conservation properties (required mitigation) that are integrated into the Wildlife and Regulatory Agencies' permitting process to facilitate issuance of permits for the M2 freeway projects.
- c. The Preserves will be conserved in perpetuity. The NCCP/HCP and Regulatory Agencies' permits will require that these Preserves have a biologist review the condition of the biological resources (including wildlife movement) on a regular basis to ensure that the resources are protected and that threats are adequately addressed. The biologist will make management recommendations and work with the Wildlife Agencies and Preserve Manager to ensure the resources are not degrading. These required conditions will remain in perpetuity.

¹ The M2 EMP has also funded multiple restoration projects. These public access principles and guidelines do not apply to the restoration project areas as they are owned and managed by separate entities.

- d. Permits are anticipated to be issued by the Wildlife Agencies, United States Army Corps of Engineers, and the State Water Resources Control Board (Regulatory Agencies) pursuant to the NCCP/HCP and a comprehensive permitting process with the regulatory agencies. These permits will facilitate the construction of the M2 freeway improvement projects.

Provide Complementary Access Opportunities

- Recreational access is an important co-benefit, but not the principle public purpose for which properties are acquired by OCTA under the EMP. Access must be established and managed so as to ensure the permit conditions of the NCCP/HCP and Implementing Agreement, as well as the regulatory permits, are adhered to in perpetuity. The NCCP/HCP stipulates that recreational access be limited to passive activities such as walking, jogging, hiking, bird watching, non-competitive mountain biking, equestrian use, and limited picnicking. Certain inherent dangers exist on the Preserves and include; mountain lions, rattlesnakes, poisonous insects, poison oak, extremes in weather, loose rocks, and steep/rugged terrain.
- Access (including public access programs) should be provided consistent with the constraints of protecting habitat and species resources, historical resources, terrain, surrounding land uses, limits of allowable impacts within Preserves, parking and/or staging area opportunities, suitable trails, access points, management costs, and community support.
- Where public access can be provided while adhering to the goals of the NCCP/HCP, existing fire and utility roads should initially form the core trail system within Preserves while making best efforts to maintain consistency and compatibility with regional trail systems. Trails should be minimized where possible to preserve intact and naturally functioning habitat. Minimizing the amount of trails on the Preserves is important as this will limit the edge effects and the proportion of the property that is exposed to potential disturbance. Single track trails may be utilized if the trail helps to form a core system and/or complete a loop within the Preserve and the use of the trail does not negatively affect sensitive resources. OCTA will be required to ensure that the number, size, and location of the trail system do not increase to more than what is approved by the Wildlife Agencies. Installation of fencing may also be necessary along certain trails to discourage off-trail activities. All trails will require maintenance to keep them safe. These tasks will be more realistic to manage if the trail system is smaller and well-defined.
- Partnerships with community and user groups should be developed to help manage and staff access as well as docent activities and responsibilities.
- A robust and sustained public education program should be established to communicate and regularly reinforce the history, purpose, and value of the Preserve system. The message should include that preserving these lands in perpetuity not only benefits biological resources, but also provides protection of historical vacant lands and view sheds which add value to the community.

The following is a **Draft Model Public Access Framework** for OCTA Preserves.

1. The default form of public access is managed or structured access, provided by the Preserve Manager, potentially augmented, as conditions warrant, by:
 - a. Docent-led managed access through partnerships with community and user groups;
 - b. Self-managed access through partnerships with community and user groups;

- c. A permit system; and/or
 - d. Open access days and locations.
2. Public access is scalable and can be actively and adaptively managed by changing the form, frequency, numbers, times of day, days of week and month, and season that activities are conducted depending upon circumstances and status of resource protection, observed impacts, and compatibility of different user groups.
 3. Some Preserves may have extremely limited or no public access opportunities because of significant habitat value², safety concerns, relative isolation, lack of trails or trail connections, and/or conflicts with surrounding land uses.
 4. Enforcement of public access limitations and violations of access rules and policies is progressive and aimed at education and diversion of the activity to other more suitable locations rather than punishment.
 5. Repeated violation of access rules and policies and/or evidence of damage or harm to the Preserves may result in fines significant enough to force change in behavior and restricted public access or closures until resource protection can be assured. Fines may vary and, depending on the type and severity of the impact, could result in a per acre cost to restore and offset damage to a Preserve. The Preserve Manager should have the capacity to actively cite repeat violators and pursue damage reimbursements.

Master Response C - Regional Trails Planning

A number of comments to the Plan address how the Preserve RMPs public access policy will address the regional trails planning of local jurisdictions, specifically the Foothill/Trabuco Specific Plan (FTSP) for Preserves in the Trabuco Canyon area. OCTA will coordinate with local agencies and stakeholder groups to address regional trail planning to the extent that proposed trails in the FTSP and other regional trails planning efforts intersects with the OCTA Preserves. However, OCTA will coordinate with the County to the extent that regional trail planning efforts does not conflict with OCTA's primary objective of maintaining its Preserves for their habitat value. It is important to note that the majority of the Preserves that OCTA owns are largely surrounded by private properties with limited or no public access. OCTA must keep this in mind when permitting any sort of access on its Preserves as to not inadvertently encourage trespassing onto adjacent private properties.

A connection with a regional trail system that traverses a Preserve would need to meet the following criteria:

1. The connection will not conflict with maintenance and enhancement of the habitat values of the Preserves.
2. The connection would not result in a change in the amount and type of public access that would threaten the biological integrity of the Preserves.
3. The connection cannot facilitate or encourage trespassing and/or unwanted public access within an adjoining property of the Preserve.

² Significant habitat value can be defined as habitat that imperiled species are reliant upon in order to help prevent their extinction, fragmentation, or reduction in range.

4. The regional trail must be designated and approved as a public access trail by a local planning entity with land use authority.
5. The connection does not result in OCTA exceeding its cap of direct habitat disturbance on its Preserves.

OCTA recognizes that regional trails planning evolves and changes over time. OCTA will participate in regional trails planning efforts to evaluate possible trail connections and anticipate how (and if) future trail connections could be made. This requirement will be extended to the Preserve Managers if and when OCTA transfers ownership and responsibility for managing a Preserve to another entity.

In addition, there were a number of comments specifically dealing with the Foothill/Trabuco Specific Plan compliance issues. The following summarizes current regional plans addressing trails around the OCTA Preserves:

Foothill/Trabuco Specific Plan – The County of Orange Foothill/Trabuco Specific Plan (FTSP) was adopted in 1991 and has been amended at various times since. The Recreational Element of the FTSP includes a map (Exhibit II-8 of the FTSP) showing local trails within the FTSP boundary. This document enables the County of Orange to condition development of property within the FTSP, in some situations, upon the dedication of public trails and provision of other public benefits in exchange for development approvals being sought through the entitlement process. As previously discussed, OCTA acquired the seven Preserves from private property owners who had kept these properties vacant. There are no habitable structures on any of the OCTA Preserves and OCTA does not plan to construct any structures on these Preserves as they have been enrolled into the Plan to be preserved as conservation properties in perpetuity.

A number of these trails intersect with four of the OCTA Preserves (see Figure 9-1). The FTSP identifies policies for local riding and hiking trails (Section 5.0 of the FTSP) that occur on private property. If a property is planned for residential development and has a local trail shown in Exhibit II-8 of the FTSP adjacent to or within its boundaries, the FTSP outlines a set of conditions that would be applied during the plan/site development permit/subdivision map approval (entitlement) process to address implementation of local trails. The identification of local riding and hiking trails in the FTSP does not establish a legal right to pass over these trails. In many cases, the existing trails pass over private land and have no public easement recorded.

The acquisition and establishment of the Preserves by OCTA is not subject to County approval, nor does it trigger any requirement of OCTA to dedicate trails within the Preserves as public trails since OCTA is not seeking any entitlements to develop the property within the Preserves. Nonetheless, OCTA will participate in ongoing regional trails planning (as outlined above) in this region.

The FTSP identifies a number of trails within the boundaries of the OCTA Preserves. Many of these trails traverse the OCTA Preserves and then continue on to privately owned lands and/or publicly owned lands that do not currently allow public access (see Figure 9-1). The trails depicted in the FTSP and how they relate to the OCTA Preserves are discussed in further detail below.

Ferber Ranch Preserve

- **Hickey Canyon Trail (g)** – This trail is a dirt road also known as Trabuco Oaks Drive/Hickey Canyon Road (Trabuco Oaks Drive becomes Hickey Canyon Road). Access to this road is currently being provided, and will continue for neighboring parcel owners per existing

reciprocal access agreements as well as to the Hamilton Trails neighborhood (located west of the Preserve) in emergency situations. Hickey Canyon Trail continues through the OCTA owned Preserve and then onto private property. In the future, if the adjacent private property owner(s) allow public use of this trail, OCTA would be willing to coordinate and discuss additional use of this trail within the Preserve. Currently, the adjacent private property owner(s) does not allow public access.

- **Rose Canyon Trail (i)** – Rose Canyon Trail is actually an existing paved road known specifically as Rose Canyon Road. Access to the Rose Canyon Trail/Road will continue uninterrupted as this portion of the trail that bisects the Ferber Ranch Preserve is a paved open roadway. Rose Canyon Road is privately owned by adjacent neighbors. This trail/road currently continues north to a security gate that is owned and operated by the Joplin Youth Center. The route of this trail then becomes unauthorized as it deviates to the west of the paved road, onto the Ferber Ranch Preserve just south of the Joplin Youth Center. It traverses through sensitive oak woodland habitat (within the Ferber Ranch Preserve) and continues north through County owned land. This unauthorized trail is a security issue as public access is prohibited through the County property, due to the operation of the Youth Center. This portion of the trail is also detrimental and causing erosion damage and scarring to oak woodland habitat within the Ferber Ranch Preserve. If the County allows future public access through its property, OCTA would be willing to coordinate and discuss realigning this trail and granting access to another less sensitive location within the Preserve.
- **Unnamed Canyon Trail (j)** – The Unnamed Canyon Trail depicts a trail that traverses the southern portion of the Ferber Ranch Preserve. This trail (as depicted on the FTSP graphic) does not currently exist at the Ferber Ranch Preserve. There is a trail within the southern portion of the Preserve that connects to the private property to the south of the Preserve. Use of a trail at this location would encourage trespassing through private property to the west and to the south of the Preserve. These private property owners have expressed to OCTA that they do not allow public use of their property. In the future, if the adjacent private property owners allow public use of this trail, OCTA would be willing to coordinate and discuss use of a trail within the Preserve to support an offsite connection.
- **Canyon Connector Trail (l)** – A trail exists within the Ferber Ranch Preserve that loosely aligns with the FTSP designated Canyon Connector Trail. This trail traverses from Rose Canyon Road across the Preserve to Trabuco Oaks Drive/Hickey Canyon Road and then ultimately to private property to the west of the Preserve which is currently owned and managed by CDFW. The portion of the trail that connects Rose Canyon Road to Hickey Canyon Road will be available as part of the managed access program for this Preserve. It is a designated fire/management road that is maintained and utilized on a regular basis for Preserve monitoring activities. The western portion of this trail leads into CDFW managed land. CDFW currently does not allow public access. In the future, if CDFW allows public use of this trail, OCTA would be willing to coordinate and discuss granting additional use of this trail within the Preserve. A realignment should be considered as the current depicted western portion of this trail does not exist.

O’Neill Oaks Preserve

- **Trabuco Canyon Trail (k)** - This trail is an existing dirt road that enters the O’Neill Oaks Preserve from the north. This road is currently being utilized and maintained for management of the Preserve. Trabuco Canyon Trail continues through the OCTA owned Preserve and then

onto private property. In the future, if the adjacent private property owner(s) communicates to OCTA that they would allow public use of this trail, OCTA would be willing to coordinate and discuss additional use of this trail within the Preserve.

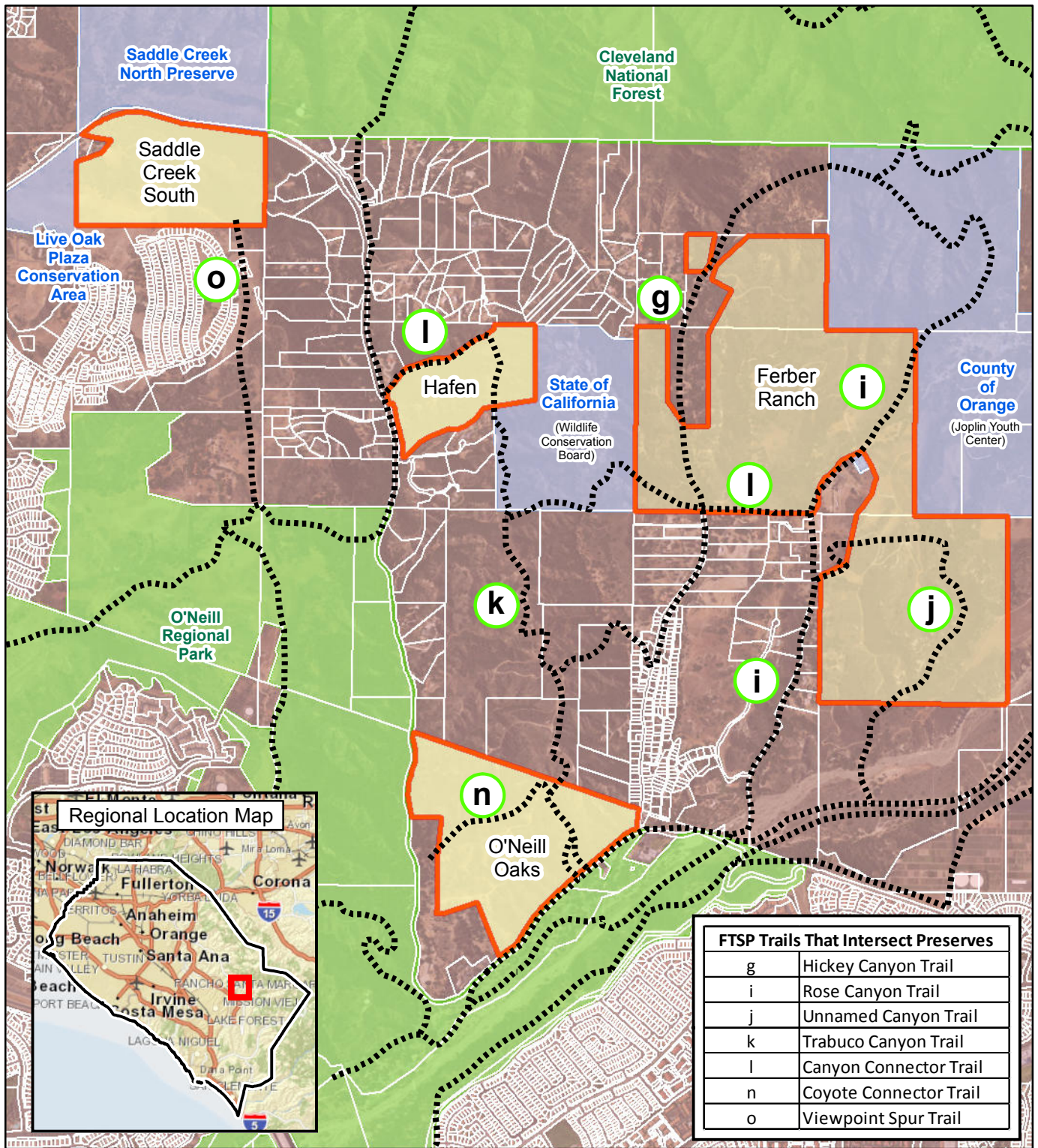
- **Coyote Connector Trail (n)** – The Coyote Connector Trail is an existing unpaved road that has not been maintained in recent years. The Coyote Connector Trail continues through the O’Neill Oaks Preserve and continues onto private property to the west (see Figure 9-1). A fence line and gate are necessary along this boundary of the Preserve as the adjacent property owner manages livestock (particularly cattle). Previous to OCTA purchasing this Preserve, cattle roamed the O’Neill Oaks property. In order to protect the habitat of O’Neill Oaks the fence line was established. In the future, if the adjacent private property owner(s) allow public use of this trail, OCTA would be willing to coordinate and discuss additional use of this trail within the Preserve. Currently, the adjacent private property owner(s) does not allow public access. This arrangement would also have to ensure that livestock would not have access to the O’Neill Oaks Preserve.

Hafen Preserve






- **Canyon Connector Trail (l)** - The Canyon Connector Trail makes a sharp turn to the east off of Live Oak Canyon Road and follows the northern boundary of the Hafen Preserve (see Figure 9-1). This segment of the trail has gone unmaintained for many years and is unsafe to utilize. This portion of the Preserve is heavily vegetated, steep and contains many eroded ruts creating an unsafe area for access. The Trail then turns south and follows the existing ridge line trail across the Preserve and continues south to the CDFW managed land. CDFW currently does not allow public access. In the future, if CDFW allows public use of this trail, OCTA would be willing to coordinate and discuss granting additional use of this trail within the Preserve. The trail is very narrow in most locations and signs show that it is utilized more by wildlife than by humans.

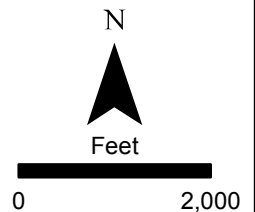
Saddle Creek South Preserve

- **Viewpoint Spur Trail (o)** - The FTSP identified one trail, the Viewpoint Spur Trail (o), which appears to terminate at the southern boundary of the Saddle Creek South Preserve. This trail traverses privately owned lands (south of the Preserve) (see Figure 9-1) before reaching the Saddle Creek South Preserve. In the future, if access is granted through these privately owned lands, OCTA would be willing to discuss and coordinate granting access to this viewpoint location.



Legend

-  Preserve Boundary: managed access
-  FTSP Trails
-  Public Land: limited or no access
-  Public Land: managed access
-  Private: no access



FTSP Trails and Surrounding Land Ownership Near OCTA Preserves in Trabuco Canyon

Figure 9-1

Comment Letter 21: Paul Their – 11/20/14



COMMENT FORM

Orange County Transportation Authority (OCTA) Measure M2
Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)
Draft Environmental Impact Report/Statement (DEIR/EIS)

COMMENTS WILL BE ACCEPTED UNTIL 5:00 PM ON FRIDAY, FEBRUARY 6, 2015

Privacy Notice: Please be aware that your entire comment—including your personal information—will be included in the administrative records for the proposed project, and will be part of the final EIR/EIS.

Please Print

Name PAUL THEIR Title _____

Organization or business (if applicable) _____

Address 19241 HICKY CANYON RD

City TRABUCO CANYON State CA Zip 92679

Phone (949) 326-8410 Fax _____ E-Mail _____

This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

21-1 | I AM TRYING TO FIND OUT WHAT CREDITS OCTA RECEIVED FOR THE PURCHASE OF THE FERBER PROPERTY:

21-2 | ALSO WHAT IS THE ANTICIPATED DATE FOR EQUESTRIAN ACCESS TO FERBER.

Thanks
Paul



Response to Comment Letter 21: Paul Thier - 11/20/14

Comment 21-1 Response

Comment: The commenter asks about credits that OCTA received for the acquisition and preservation of the Ferber Ranch property.

Response: In general, conservation credits have been identified through the biological analysis and the Ferber Ranch contains approximately 385 acres of natural communities that OCTA would be able to utilize as credits under the Plan. These included chaparral, grassland, riparian, scrub, and woodland communities. For detailed information, please refer to the M2 Natural Community Conservation Plan/Habitat Conservation Plan (M2 NCCP/HCP or Plan) Section 5.4.2, "Preserves", and specifically the Ferber Ranch Preserve description which summarizes the biological resources within Ferber Ranch, and Table 5-3 which contains a summary of biological resources within each OCTA Preserve. In addition, refer to Chapter 6, "Conservation Analysis", which addresses how the Ferber Ranch Preserve contributes to achieving the goals and objectives as set forth in the Plan.

Comment 21-2 Response


Comment: The commenter asks when equestrian access will be available on the Ferber Ranch Preserve.

Response: Regarding equestrian access, as previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. As summarized in Table 9-2 above of this Final EIS/EIR, the current and future access options and public access challenges are discussed. Note, the Ferber Ranch Preserve is constrained by access challenges since it is surrounded by private properties that limit or don't allow public access; rural roads with limited vehicle capacity; and lack of staging areas such as parking and restroom facilities.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detail information related to access on the Ferber Ranch please refer to draft Ferber Ranch RMP (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 22: Diana Capps – 12/3/14

COMMENT FORM

#1		<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Wednesday, December 03, 2014 4:31:32 PM Last Modified: Wednesday, December 03, 2014 5:38:07 PM Time Spent: 01:06:34 IP Address: 24.249.246.186</p>
-----------	---	---

PAGE 1

Q1: Name	Diana Capps
Q2: Title	<i>Respondent skipped this question</i>
Q3: Organization or business (if applicable)	<i>Respondent skipped this question</i>
Q4: Address	21112 Cedar Lane
Q5: City	Mission Viejo
Q6: State	CA
Q7: Zip	92691
Q8: Phone	949 455-7321
Q9: Fax	<i>Respondent skipped this question</i>
Q10: E-Mail	capps454@hotmail.com
<p>Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.</p> <p>22-1 I have been a horseback rider here near Ferber Ranch since 1984. My horse is located at Their Ranch and so we are pretty much isolated when before we could ride on Ferber. In order to get to the O'Neil Park. I have to go down Trabuco Oaks road which is a crowded area with constant activity and jumbled homes all down the street. While you are deliberating when you will open the Ferber to the equestrians, could you please give us right of way through Ferber ranch to Rose Canyon Road which is less crowded and less activity to go down to the park. When I ride down Trabuco Oaks, I feel I take my life in my hands.</p> <p>Thanks for your attention to this matter.</p>	

Response to Comment Letter 22: Diana Capps – 12/3/14

Comment 22-1 Response

Comment: The commenter asks about public access through the eastern portion (via Rose Canyon Road) of the Ferber Ranch Preserve to access O'Neill Regional Park.

Response: Currently, OCTA does not permit unmanaged public access on the Ferber Ranch. This is primarily due to the Preserve being surrounded by private properties that have limited or do not permit public access. As discussed in Table 9-2 above of the Final EIS/EIR, OCTA will continue to consider adjusting the frequency and type of public access that may be permitted going forward. Furthermore, as noted in response 23-1, OCTA has increased the frequency of docent-led equestrian ride events in 2016 and encourages participation from the commenter.

Additional information related to the framework and guidelines that have been developed to ensure compliance with the Plan are discussed in pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the Ferber Ranch please refer to draft Ferber Ranch RMP (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 23: Rod Vansickle – 1/21/15



COMMENT FORM

Orange County Transportation Authority (OCTA) Measure M2
Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)
Draft Environmental Impact Report/Statement (DEIR/EIS)

COMMENTS WILL BE ACCEPTED UNTIL 5:00 PM ON FRIDAY, FEBRUARY 6, 2015

Privacy Notice: Please be aware that your entire comment—including your personal information—will be included in the administrative records for the proposed project, and will be part of the final EIR/EIS.

Please Print

Name Rod Vansickle Title Private resident

Organization or business (if applicable) _____

Address 31112 Hamilton Trail

City Trabuco Canyon State Calif. Zip 92679

Phone 949-858-5731 Fax _____ E-Mail rodvasickle@sbcglobal.net

This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

23-1 | With regards to the Ferber Ranch property I think an annual pass would work better
than a docent led program. The area is too small to support a docent program and there
is no staging areas. OCTA could charge a nominal annual fee and the area could
be self policed.

Response to Comment Letter 23: Rod Vansickle – 1/21/15

Comment 23-1 Response

Comment: The commenter provides input about options for public access on the Ferber Ranch Preserve.

Response: As summarized in Table 9-2 above of the Final EIR/EIS, a permit system for access is under consideration as one of the future options but OCTA would need to continue to gauge the success of the current docent-led approach as it relates to protection of the biological resources. In addition, due to community interest and success of previous events, OCTA has increased the frequency of docent-led equestrian ride events in 2016. OCTA concurs there are access challenges such as the lack of staging areas with the Ferber Ranch Preserve. However, enabling self-policing of the Ferber Ranch Preserve could present additional challenges such as trespassing on to adjacent private properties, vandalism, and degradation of biological resources.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detail information related to access on the Ferber Ranch please refer to draft Ferber Ranch RMP (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 24: Jamie Trevor – 1/28/15

From: [Jamie Trevor](#)
To: [OCTA NCCP HCP Comments](#)
Subject: Ferber Ranch
Date: Wednesday, January 28, 2015 8:06:48 AM

24-1

Dear OCTA,
Thank you for allowing us to comment on this issue. I have been equestrian out and Trabucco Canyon for over 20 years, I enjoy the tranquility and serenity that the natural environment offers in the canyon. Being an equestrian I also respect the environment. Over the last several years many changes have occurred on this property that I don't think are in the best interest of this particular environment. Several fences have been put up completely blocking off this property not allowing for any access. The property went from being a place of only animal and hoof prints covered the fire roads to a property that was constantly being patrolled by a vehicle. This vehicle driving around for eight hours a day patrolling this "protected land" seems to me has more environmental impact then the horses that have been riding on this property for decades. I have noticed our deer population dwindle. I hope this land one day is opened up for all of us taxpayers that support measure M2. This land could be treated like many other protected lands for example the Back Bay in Newport or Whiting Ranch. with gates opening at dawn and closing at dusk, this land can be self policed by the people who care most about it. It would then free up monies being spent for overtime mounted police, who as far as I know today has never caught one person on the property. We have watched over this land in particular for over the last 30 years, looking out for anybody that could possibly mean harm to the property. I agree this land should be protected and cared for for future generations. I also believe it should be enjoyed and cherished by the people who are interested now. If the property was open on a trial basis I believe our community would show OCTA that we can be trusted to treat this land with the respect that it deserves while enjoying the sheer beauty of this wonderful piece of property.

I trust the OCTA has the best interest of the community in which all of these properties were purchased.

Thank you,
Jamie Trevor.

Sent from my iPhone

Sent from my iPhone

Response to Comment Letter 24: Jamie Trevor – 1/28/15

Comment 24-1 Response

Comment: The commenter provided input on the Ferber Ranch Preserves in Trabuco Canyon, which included fencing, patrol, and access.

Response: When OCTA acquired Ferber Ranch, fencing on the perimeter of this Preserve had already been installed by previous property owner(s). OCTA did undertake some additional fencing of the Preserve when activities that were detrimental to the protection of the biological resources were discovered. These included trespassing, degradation of cactus, illegal dumping, and tree cutting. Due to the aforementioned issues, OCTA was compelled to increase patrol of the Preserve. The patrol vehicle utilizes the fire access road system to minimize environmental impacts. With respect to the recommendation to permit access on the OCTA Preserve similar to Newport Back Bay and Whiting Ranch, there is a principle difference between these parks and OCTA's Preserves. Newport Back Bay and Whiting Ranch were acquired/dedicated to the County of Orange for public park purposes and likely, as part of that acquisition/dedication were required to be open to the public. OCTA Preserves, on the other hand, were acquired to be conserved in their natural state to mitigate impacts to similar land from M2 freeway projects.

Table 9-2 above of this Final EIR/EIS provides a summary of the public access options under consideration for the OCTA Preserves. Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detail information related to access on the OCTA Preserves please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 25: Equestrian Trails, Inc. – 2/3/15

Equestrian Trails, Inc.
 Corral 357
 P.O. Box 1026
 Trabuco Canyon, CA 92678
<http://saddlebackcanyonriders.com/>
 President: James Iacono ..714-612-1789



February 3, 2015

Orange County Transportation Authority
 Attn: M2 NCCP/HCP
 550 South Main Street
 P.O. Box 14184
 Orange, CA 92863-1584

Attn: Dan Phu, Section Manager
 Mr. Phu:

Equestrian Trails, Inc. was established as a nonprofit corporation in 1944 with the charter to be “Dedicated to the Acquisition and Preservation of Trails, Good Horsemanship, and Equine Legislation”. ETI Corral 357- Saddleback Canyon Riders acts to accomplish these goals and believes we offer the OCTA an opportunity to accomplish defined conservation and recreation goals. We are prepared to participate as a resource to meet preserve objectives in the context of the Ferber Ranch and O’Neill Oaks properties.

We believe our comments to the EIR are most effectively presented within the context of the Resource Management Plan (RMP) of each preserve as actionable items that serve to advance the goals and objectives of each preserve.

25-1 Specifically, we believe we can contribute significantly to each of the Resource Management Plan components as outlined in the OCTA document.

I. Saddleback Canyon Riders goals:

1. Create a formal **public outreach** program to advance the conservation and preservation goals of the NCCP/HCP, and integrate such a program with planned, scheduled field trips into the preserves.
2. Actively participate in a **training and docent program** to lead and be responsible for compliance
3. Help develop a recreation plan component that defines appropriate levels of passive recreational activities within the preserves, and help develop authorized and approved trails by supporting **restricted access** limited only to existing fire roads.

II. NCCP/HCP Language:

25-2 The projects require several actions where we believe we can contribute directly. Specifically, the NCCP/HCP states:

- Section 1.4.3 – Public Outreach and Involvement:
 “Meaningful opportunities for the public and agencies to actively engage interested parties in the development and evaluation of proposed conservation measures and strategies.”

25-2

Actionable Item:

We ask to be involved in the development of conservation easements by understanding habitat for preservation and reviewing preliminary habitat maps to help develop defined trails clear of habitat.

cont.

ETI Corral 357- Saddleback Canyon Riders will gain an understanding of the species the habitat intends to protect, and integrate this into our public outreach program.

- Section 8.4 – Annual Reporting Requirements:
"Summary of the status of Preserve management and monitoring activities, including any actions taken through adaptive management and/or as a response to Changed Circumstances"

Actionable Item:

We ask to be used as a resource in monitoring activities to help accomplish the adaptive management goal.

25-3

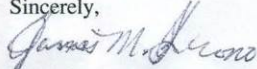
III. ETI Corral 357-Saddleback Canyon Riders' participation and responsibility:

1. Participate in **governance**; i.e. be appointed to appropriate volunteer organizations, and participate as a resource in an active partnership role.
2. Create **public outreach** to assure community understanding of preserve resources, goals and objectives.
3. Acquire training/certification at the docent level so **monitoring and reporting** activities can be performed in accordance with preserve requirements.
4. Expand our existing "Trabuco Canyon Emergency Evacuation Plan" already endorsed and supported by the Orange County Fire Authority and other agencies into a more active **fire management plan**.
5. Advocate for **approved trails** by being part of the development process, and offering regulated preserve experiences compliant with the RMP.
6. Advocate for trail connectivity between the Cleveland National Forest and adjacent community or OC Parks lands to **honor wildlife corridors** and act as an overlay to how sensitive plants and animals are protected.

We urge the Committee to consider ETI Corral 357-Saddleback Canyon Riders as a resource, and to direct it in an appropriate manner to help guide the stewardship of each preserve.

In conclusion, we support the DEIR and urge the OCTA and approving agencies to certify the DEIR with our comments inserted appropriately and we will comment again once the DEIR is recirculated for review. Please incorporate these comments in the public record for the OCTMA M2 Project and keep us informed of all progress and actions regarding the Project.

Sincerely,



James M. Iacono
ETI 357 President

Response to Comment Letter 25: Equestrian Trails, Inc. – 2/3/15

Comment 25-1 Response

Comment: The commenter acknowledges that their comments to the EIR are most effectively presented within the context of the Resource Management Plan (RMP) of each preserve as actionable items.

Response: OCTA appreciates the comments and input from the Equestrian Trails Inc. (ETI) and has been coordinating with ETI to implement the docent program at OCTA Preserves in Trabuco Canyon. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with ETI. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 25-2 Response

Comment: The commenter requests ETI be involved in public outreach and monitoring of OCTA Preserves.

Response: OCTA has implemented a public outreach program as part of the development of the draft RMPs and will continue to collaborate with ETI and other local groups on the outreach implementation. For detailed information related to access on the OCTA Preserves please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 25-3 Response

Comment: The commenter requests ETI be considered a resource would like to participate in the stewardship of each preserve.

Response: OCTA recognizes the role and function of ETI and looks forward to a meaningful and ongoing collaboration to establish and implement a public access program for the OCTA Preserves. As described previously on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B), the development of a public access program that balances protection of biological resources and allows for passive recreational opportunities will involve an adaptive management process. As summarized on the Table 9-2 of this Final EIR/EIS, there are current and future options for public access that will continue to be evaluated over time and OCTA will be reaching out to groups like ETI to help support the necessary monitoring efforts. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 26: Rostom Hajboutros – 2/5/15

From: [Rostom Hajboutros](#)
To: [OCTA NCCP HCP Comments](#)
Cc: [Tom Hetzel](#)
Subject: Open more recreation/ trails.
Date: Thursday, February 05, 2015 2:08:03 PM

26-1

My name is Rostom Hajboutros, my phone number (714) 602-8061 I reside at : 1181 north Lincoln street Orange CA, 92867. I am an outdoorsman and a horse owner. I would like to see more open recreational areas and horse trails to ride on. Thank you,
Rostom Hajboutros.

Sent from my iPhone

Response to Comment Letter 26: Rostom Hajboutros – 2/5/15

Comment 26-1 Response

Comment: The commenter requests more recreational opportunities and trails.

Response: With respect to the recommendation to permit more open access on the OCTA Preserves, there is a principle difference between public parks and OCTA's Preserves. Public parks are required to be open to the public for passive recreational purposes. OCTA Preserves, on the other hand, were acquired to be conserved in their natural state to mitigate impacts to similar land from M2 freeway projects. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detail information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 27: Delma Johnson – 2/5/15

RECEIVED

FEB 11 2015

PLANNING DIVISION

Feb 5, 2015

Orange County Transportation Authority
(OCTA) Measure MZ.
Natural Community Conservation Plan/Habitat
Conservation Plan (NCCP/HCP)
Draft Environment Impact/Statement (DEIR/EIS)

Delma Johnson Resident 38yrs.
Land owner
20091 Trabuco Oaks Dr. Box 435
Trabuco Cyn CA 92678.
949-858-0187
delmaJohnson17@gmail.com

Comment to EIR/EIS.
Refer: Foothill/TRABUCO Specific Plan
Recreation Component
LOCAL, Regional trails.

27-1

Has the Trabuco Local, Regional riding Trail
System as defined in the Trabuco Specific
PLANS, Recreational Component been
included in the Natural Communities
Conservation PLAN.

1 of 3

2-5-2015

Conserving natural habitats and the equestrian component of the Trabuco Buffer, Cleveland National Forest and O'Neill Regional Park, has been an ongoing effort to keep connection not only to the Community but also to the equestrian heritage of the Specific Plan and Orange County, as a quiet recreational usage.

27-2

Along with the migration of our natural wildlife thru our County, the ability for the Trabuco Community to travel on our horses thru these protected areas are also in need of protection.

The Trabuco, Silverado, Mojave, Rancho Santa Margarita, Dove Cyn, Coto de Caza, and Orange County, by the thousands have defined this local and regional master trails as a major priority, along with protection of natural land forms within the Buffer and natural open space.

2 of 3

2-5-2015

Equestrians, Rural residential properties and this complex and so amazing natural resource of Natural Open Space is what has given life and energy to protect and preserve by all of Orange County,

Myself, my children, my grandchildren, the Trabuco Community, all who visits, have had the privilege and sole healing experience of our conservation efforts in the Trabuco Buffer.

27-2
cont.

This conserving of Natural Habitats and the equestrian ^{loop} Community Trail System which connects to the Master Plan of Trails must be an integral objective in the effort to preserve/protect.

Our horses are also under threat of Extinction in Orange County along with our Rural residential usages that supports the protected areas.

Please take time to understand, these usages are intermingled and makes this area most desirable for the best natural outdoor experience in Orange County.

Dulma Johnson
Dulma Johnson
38 yr Resident

3 of 3

Response to Comment Letter 27: Delma Johnson – 2/5/15

Comment 27-1 Response

Comment: The commenter inquired if the Recreational Component of the Foothill/Trabuco Specific Plan (FTSP) has been included in the OCTA NCCP/HCP.

Response: As discussed above as part of the Master Response C (pages 9-226 to 9-229) of this Final EIR/EIS, OCTA will coordinate with local agencies and stakeholder groups to address regional trail planning to the extent that proposed trails in the FTSP and other regional trails planning efforts intersects with the OCTA Preserves. The FTSP enables the County of Orange (County) to condition proposed development within the FTSP on the provision of public trails and other public benefits when owners of property within the FTSP are seeking approvals to develop the property through the entitlement process. These conditions are intended to mitigate the impact of development on property covered by the FTSP. Since OCTA acquired the Preserves to conserve it, not develop it, these conditions do not apply to OCTA's use. OCTA's primary focus must instead be on conservation of the Preserves as required by the mitigation measures which required OCTA to purchase the Preserves. However, OCTA will coordinate with the County and adjacent property owners to the extent that regional trail planning efforts do not conflict with OCTA's primary objective of maintaining and protecting its Preserves for their habitat value. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 27-2 Response

Comment: The commenter states that the ability for the Trabuco community to travel on horse through protected areas is also in need of protection and should be considered as part of the objectives.

Response: OCTA recognizes the importance of public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. The commenter requests more recreational opportunities and trails. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 28: Darryl LaFayette – 2/5/15

From: darryl96@aol.com
To: [OCTA NCCP HCP Comments](#)
Subject: Orange County M2 plan
Date: Thursday, February 05, 2015 7:02:09 PM

28-1 | We need more open recreational space for trails and the M2 plan is too vague.

Thank you
Darryl LaFayette
1742 Ano Nuevo Dr
Diamond Bar, Ca. 91765
Tel. 909-838-7537
E-mail Darryl96@aol.com

Response to Comment Letter 28: Darryl LaFayette – 2/5/15

Comment 28-1 Response

Comment: The commenter requests more recreational opportunities and trails and states that the M2 Plan is too vague.

Response: As previously discussed under responses 24-1 and 26-1 regarding the recommendation to permit more open access on the OCTA Preserves, there is a principle difference between public parks and OCTA's Preserves. Public parks are required to be open to the public for passive recreational purposes. OCTA Preserves, on the other hand, were acquired to be conserved in their natural state to mitigate impacts to similar land from M2 freeway projects.

In addition, due to requests from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

The OCTA NCCP/HCP provides overall guidance and input on how public access and recreational opportunities can be balanced on OCTA Preserves. More Preserve specific evaluation and specific public access policies are set forth in the individual RMPs. For detail information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 29: Karen Williams – 2/5/15

From: [Karen Williams](#)
To: [OCTA NCCP HCP Comments](#)
Subject: M2 plan
Date: Thursday, February 05, 2015 4:22:06 PM

29-1 | We need more open recreational space for trails and the M2 plan is too vague.

Karen Williams
7740 E. Appaloosa Trail
Orange, CA 92869
951.834.5209
khw416@yahoo.com

Response to Comment Letter 29: Karen Williams – 2/5/15

Comment 29-1 Response

Comment: The commenter requests more recreational opportunities and trails and states that the M2 Plan is too vague.

Response: As previously discussed under response 28-1 regarding the recommendation to permit more open access on the OCTA Preserves, there is a principle difference between public parks and OCTA's Preserves. Public parks are required to be open to the public for passive recreational purposes. OCTA Preserves, on the other hand, were acquired to be conserved in their natural state to mitigate impacts to similar land from M2 freeway projects.

In addition, due to requests from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

The OCTA NCCP/HCP provides overall guidance and input on how public access and recreational opportunities can be balanced on OCTA Preserves. More Preserve specific evaluation and specific public access policies are set forth in the individual RMPs. For detail information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 30: Kristy Apalategui – 2/6/15

30-1

From: [Kristy Apalategui](#)
To: [OCTA NCCP HCP Comments](#)
Subject: Yes more recreational areas
Date: Friday, February 06, 2015 9:11:31 PM

Kristy Apalategui Orange Park arches orange ca 92869 714 2966139

Sent from my iPhone

Response to Comment Letter 30: Kristy Apalategui – 2/6/15

Comment 30-1 Response


Comment: The commenter requests more recreational opportunities and trails.

Response: As previously discussed under responses 24-1 and 26-1 regarding the recommendation to permit more open access on the OCTA Preserves, there is a principle difference between public parks and OCTA's Preserves. Public parks are required to be open to the public for passive recreational purposes. OCTA Preserves, on the other hand, were acquired to be conserved in their natural state to mitigate impacts to similar land from M2 freeway projects. In addition, due to requests from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 31: Larry Brown – 2/6/15

COMMENT FORM

#8		<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Friday, February 06, 2015 3:48:54 PM Last Modified: Friday, February 06, 2015 3:58:56 PM Time Spent: 00:10:01 IP Address: 70.169.227.41</p>
-----------	---	--

PAGE 1

Q1: Name	Larry D Brown
Q2: Title	<i>Respondent skipped this question</i>
Q3: Organization or business (if applicable)	<i>Respondent skipped this question</i>
Q4: Address	27512 Cenajo
Q5: City	Mission Viejo
Q6: State	Ca
Q7: Zip	92691
Q8: Phone	949-830-2195
Q9: Fax	949-679-4541
Q10: E-Mail	ultracareconcepts@hotmail.com

COMMENT FORM

Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

I have been outraged by the behavior to date of the OCTA regarding the Non-Public use of lands purchased by you under Measure M.

You have not done anything but take away peoples rights to hike, ride horses, bikes, fly their remote controlled aircraft. Every BUT provide public use!

Trails that have been ridden and used by Equestrian's for decades, established trails, have been taken away.

I use to ride trails behind Their Ranch, as a boarder there I would actually get off my horse and pick up trash, yet your OCTA people said we we're littering which is ridiculous. What tiny amount of trash had accumulated over decades and not by equestrian's. But they use this trumped up nonsense to close our trails.

31-1

We would ride and you OCTA cops would come roaring up in their trucks scaring our horse's and threaten us with trespassing tickets.

This is ridiculous, this is my land as a tax payer!

OCTA has been disingenuous and guilty of delaying tactics in their so called 5 year plan.

It is our land, we have a right to it. If a new ballet measure is needed to make it so then that's is what we will do if they/you don't allow public usage of our land again.

Angry as hell.

Larry D Brown, Donna E Brown, Eric C Brown and Krista R Brown

Response to Comment Letter 31: Larry Brown – 2/6/15

Comment 31-1 Response


Comment: The commenter expressed concern with OCTA not permitting access to the trails on Ferber Ranch that were formerly used by equestrians. The commenter also expressed concern about OCTA stating that littering had been occurring on the Preserve and that OCTA patrol officers were threatening the public with trespassing tickets.

Response: Comment Noted. As background, prior to OCTA's acquisition of the Ferber Ranch Preserve, it was privately owned and leased. Two stables were operated on site and allowed boarders to access the entire Ferber Ranch property. OCTA's acquisition of the property did not include the two stables. OCTA's purpose for acquiring and conserving Ferber Ranch was to fulfill mitigation requirements to offset impacts anticipated from the M2 freeway projects. The continued access was without OCTA's permission and thus, constituted trespassing. Public access was degrading biological resources (vandalism, illegal dumping, and unauthorized trail cutting through sensitive habitat) and became incompatible with the purpose for which OCTA acquired Ferber Ranch and the mitigation requirements. Due to the aforementioned issues, OCTA was compelled to increase patrols on the Preserve.

Please see Master Response A and B (pages 9-218 to 9-226) of this Final EIR/EIS in relation to public access and recreation on the Preserves. For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 32: Tracy Brown – 2/6/15

COMMENT FORM

<p>#10</p> 	<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Friday, February 06, 2015 5:26:34 PM Last Modified: Friday, February 06, 2015 5:52:33 PM Time Spent: 00:25:58 IP Address: 173.196.214.236</p>
---	--

PAGE 1

Q1: Name	Tracy Brown
Q2: Title	<i>Respondent skipped this question</i>
Q3: Organization or business (if applicable)	<i>Respondent skipped this question</i>
Q4: Address	15 Crivelli Aisle
Q5: City	Irvine
Q6: State	CA
Q7: Zip	92606
Q8: Phone	213-700-9569
Q9: Fax	<i>Respondent skipped this question</i>
Q10: E-Mail	toriol@aol.com

COMMENT FORM

Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

32-1

Thank you for the opportunity to comment on the proposed conservation projects as outlined on your website. I am writing specifically about the 1000+ acres in Trabuco Canyon. In short, I love that place. A whole new world opened up for me and my family twelve years ago when we had the pleasure of purchasing Tennessee Walking Horses from Buck Ranch in Trabuco Canyon, on the exact site of the OCTA preservation effort. Being able to spend amazing days in the saddle bonding with friends, family, and our horses, I found myself believing, "What better way to enjoy the gift of unsoiled, natural surroundings than on horseback?" I marveled at how far I could see into the distance from those mountain trails--on clear days, I swear I could see the ocean! We never wanted to leave. It was a privilege and a blessing to be able to take in nature, learn about new plant life--that sage picked right out of the ground keeps the flies away--witness animals in their natural habitat. It was my yoga, my religion! Trail riding is a way of life. Now, a few years later and with a move to New York City and back...I now find that my beloved ranch is closed to me, my family and most importantly, my horse. We are heartbroken. And while my trustworthy Tennessee Walker, Renegade Prowler (aka Jazz), still enjoys the friendly surroundings of the ranch hands, horse folks and other horses, we are relegated to walking up and down a one mile stretch of road, making a day in the saddle feel more like a \$1 ride at the fair than a way of life. Horse folks are the kindest, most sensitive and caring people around. We miss the wide open space. We miss the mountain. We miss NATURE! With a bad knee and a bad back, horseback riding is perhaps the ONLY way I would ever have been able to appreciate the beautiful untouched environment of Trabuco Canyon and Orange County, yet, I might never get to see it again and that saddens me. The other boarders and I lament the loss of such great riding trails and the good times we shared on horseback. If there is anyone who would take the best care of what OCTA intends to preserve, it's those of us who have a TRUE APPRECIATION for the trails, the mountain, and Trabuco Canyon. Please reconsider and allow us to reclaim the use of such a wonderful lifestyle and such a beautiful peace of California. Thank you in advance for your consideration. Warm regards, Tracy Brown

Response to Comment Letter 32: Tracy Brown – 2/6/15

Comment 32-1 Response


Comment: The commenter requests more recreational opportunities and trails.

Response: OCTA recognizes the importance of public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 33: K. Frey – 2/6/15

COMMENT FORM

#9		<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Friday, February 06, 2015 1:28:29 PM Last Modified: Friday, February 06, 2015 4:52:02 PM Time Spent: 03:23:32 IP Address: 70.209.204.98</p>
-----------	---	--

PAGE 1

Q1: Name	K.Frey
Q2: Title	<i>Respondent skipped this question</i>
Q3: Organization or business (if applicable)	<i>Respondent skipped this question</i>
Q4: Address	27542 Agrado
Q5: City	Mission Viejo
Q6: State	Ca
Q7: Zip	<i>Respondent skipped this question</i>
Q8: Phone	<i>Respondent skipped this question</i>
Q9: Fax	<i>Respondent skipped this question</i>
Q10: E-Mail	<i>Respondent skipped this question</i>
<p>Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.</p>	
33-2	<p>Repening the land for equestrian pleasure riding as it has been used in many years past is the most natural use. Equestrian pleausure riding in this area is a peaceful way to enjoy the land, and appreciate a large part of our history. It is also good for the small community of Trabuco Canyon, adults and children alike.</p>

Response to Comment Letter 33: K. Frey – 2/6/15

Comment 33-1 Response


Comment: The commenter requests more recreational opportunities and trails.

Response: As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 34: Ryan Jordan – 2/6/15

COMMENT FORM

#7		<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Friday, February 06, 2015 11:41:37 AM Last Modified: Friday, February 06, 2015 11:58:49 AM Time Spent: 00:17:11 IP Address: 24.199.48.122</p>
-----------	---	--

PAGE 1

Q1: Name	Ryan Jordan
Q2: Title	Mr.
Q3: Organization or business (if applicable)	<i>Respondent skipped this question</i>
Q4: Address	50 Tierra Montanosa
Q5: City	Rancho Santa Margarita
Q6: State	California
Q7: Zip	92688
Q8: Phone	9492907826
Q9: Fax	<i>Respondent skipped this question</i>
Q10: E-Mail	ryanrayjordan@gmail.com

COMMENT FORM

Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

34-I

My Name is Ryan Jordan and I'm a local Santa Margarita resident. I keep my horses out in Trabuco Canyon and we used to ride the trails all around this area prior to OCTA buying the land and completely closing it to public use. This land has been equestrian oriented forever and this area has a long standing history with the equestrian lifestyle as a whole. That has completely been taken away with OCTA's total closure of the area. Im a firm believe in Property Rights but this has a completely different twist as the land was not purchased for development but merely as a contingency/mitigation open space for other unrelated OCTA projects in other areas..Closing this land come to absolutely zero benefit for anyone. The local equestrian community watches over these areas by responsible trail usage and by closing it off it will only invite illegal activity to those who trespass. Im completely fine with OCTA's ownership of the land but please dont take away the equestrian trail access that has been a defining part of this area forever. Orange County has a major shortage of equestrian related areas and this is one of the only remaining, please don't take it away from my family and all the families that have held it dear for so many years.

Sincerely,
Ryan Jordan

Response to Comment Letter 34: Ryan Jordan – 2/6/15

Comment 34-1 Response

Comment: The commenter asserts that the trails around the Trabuco Canyon area were open to equestrian use prior to OCTA's acquisition. The commenter also requests more recreational opportunities and trails access in the Trabuco Canyon area.

Response: While it is not clear the exact circumstance for how this individual had access to the various trails in the area prior to OCTA's acquisition of the Trabuco Canyon Preserves, it is OCTA's understanding that access was granted to certain individuals who either knew the previous property owners/lessee or the owners were not aware their property were being accessed. The Trabuco Canyon Preserves acquired by OCTA were previously held under private ownership and there was no formal granting of public access on any of these properties. OCTA Preserves were acquired to be conserved in their natural state to mitigate impacts to similar land from M2 freeway projects. These Preserves have strict requirements from the Wildlife Agencies related to protection of the biological resources.

As previously discussed, due to requests from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 35: Dana Judd – 2/6/15

**Orange County Transportation Authority (OCTA) Measure M2
Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)
Draft Environmental Impact Report/Statement (DEIR/EIS)**



COMMENT FORM

Comments will be accepted until 5:00 PM on Friday, February 6, 2015

Privacy Notice: Please be aware that your entire comment – including your personal identifying information – will be included in the administrative record for the proposed project, and may be made publicly available.

Please Print

06-02-15P02:46 RCVD

DANA JUDD
Name

27246 Silverado Canyon Road,
Title

Silverado, CA 92676
Organization or business (if applicable)

Canyonville Ranch
Address

27271 Silverado Canyon Road
City, State, Zip

Silverado, CA 92676
Phone Fax

E-Mail

This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

Please see attached

3 page document.

Hand delivered on 2/6/15

at approximately 1:00 P.M.



Dana Judd
27246 Silverado Canyon Road
Silverado, CA 92676

February 4, 2015

Dan Phu, Section Manager
Orange County Transportation Authority (OCTA)
Measure M2 Natural Community Conservation Plan/Habitat Conservation Plan
Draft Environmental Impact Report/Statement
550 South Main Street
P.O. Box 14184
Orange, CA 92863-1584

RE: Public Comment Addressing the Legal Insufficiency of Alternative 2 and 3; Request for Amendment

I do not wish to go on record as "opposed" to a broad and sweeping environmental plan to preserve open space, however, I am ALARMED at the nature and directional shift which seems to have occurred in the evolution of Measure M and its so called PLAN, and I state my case as follows:

First and foremost, the VOTERS of Orange County decided in 1990 to approve a tax to solve traffic issues. Then, in 2006, the VOTERS decided to solve multiple transportation problems AND to streamline the approval process for freeway projects by conserving open space for mitigation through renewal of the tax. The initial meetings, presentations and campaign emphasized the Public's (VOTER'S) opportunity to enjoy these preserved lands.

35-1

That language has all but been eliminated and replaced with language such as "implementation of security to enforce 'no trespassing'", "controlled public access" and "signage, fencing and enforcement".

I am saddened to find such insignificant emphasis is now given to Public interface and recreation. The PLAN is replete with ambiguity as to how and when the Public (VOTERS) will, if ever, enjoy the lands they have so generously agreed to purchase.

The DEIR/EIS reads as an "US" and "THEM" document, however I am unsure as to who is who.

Unfortunately at this time, Alternative 1/ No project is the only legal alternative unless the PLAN is amended to carefully, cohesively and with great detail define recreational trail corridors and trail connections, which have been historically planned, used and adopted by government agencies and stakeholder groups throughout the defined PLAN boundaries.

The PLAN defines The Santa Ana Mountains Core Habitat Area as the "backbone" of the regional reserve system based on size, location and connectivity to other Core areas both within and beyond the county. Located within the Santa Ana Mountains area is the canyon communities of Silverado and

○ Modjeska. The community itself is represented by local government the County of Orange (OC Parks) and Silverado Modjeska Recreation and Parks District (From here on out referred to as "SMRPD", this governmental agency is a State sanctioned Special District) and is surrounded by the Cleveland National Forest (CNF) and newly acquired and dedicated Limestone Wilderness Park and Black Star Regional Park.

In essence, the Santa Ana Mountains provide the "backbone" of the recreational trail system within this portion of the County, stretching from the CNF through the Sil-Mod area and beyond, contributing crucial connectivity to neighboring wilderness parks and reaching as far as neighboring counties. The criteria used in creating crucial habitat connectivity so adequately defined in the PLAN, is also critical for creating crucial trail connectivity, yet appears to have been intentionally overlooked or omitted from the PLAN.

35-2 | The SMRPD Special District has two controlling documents which set policy for trail acquisition, (1) adopted recreational riding and hiking plan, which was created through public input and was legally and sufficiently adopted, then provided to the County of Orange Planning and (2) the SMRPD and the County of Orange rely on a planning document entitled the Silverado Modjeska Specific Plan (SilMod Plan) both legal documents contain trails which MUST be dedicated upon the trigger of development and/or properly addressed in an EIR.

35-3 | The DEIR/EIS for the Measure M2 NCCP/HCP never once mentions SMRPD, SilMod Plan and/or any feature of these plans, in spite of the fact that several projects and proposed preserves are within the SilMod Plan and SMRPD boundaries such as the Lower Silverado Restoration Project, currently underway, the recently acquired MacPherson Property and the highly desired Baker Square (Takahashi) Property.

In summary, development of a Park or a Preserve is DEVELOPMENT. Because it is preferred or more palatable than other forms of development does not negate the legal rights and responsibilities of governmental agencies and the many stakeholders.

Unfortunately Alternative 2 and Alternative 3 are LEGALLY AND FATALLY **FLAWED** unless and until it is amended to incorporate and interface with the SMRPD, its boundaries and adopted trail plan and the SilMod Plan and its defined and prescribed trail plan.

The proposed amendment should include and address:

35-4 | (a) The acknowledgment of trails which are clearly and permanently defined in the SMRPD adopted trail plan; and (b) acknowledgement of trails which are clearly defined in the SilMod Plan.

Furthermore, the amendment should plan to:

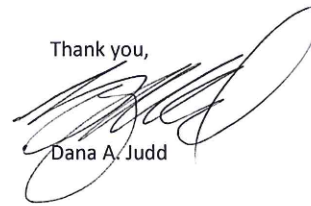
○ (a) provide actual trail easements which would be held by in perpetuity by the SMRPD and/or held jointly with the County of Orange (OC Parks) when necessary; (b) Provide an irrevocable offer of dedication to the SMRPD, in lieu of trail easements, when further environmental assessment is necessary to determine the viability of the actual trail alignment; (c) Acknowledgement that the requested trail easements historically and legally precede the Preserve (Park) and are considered to be

35-4
cont.

superior to the anticipated conservation easements, should the trail easements be found to exceed the maximum 11 acres or the 1% of the natural habitat limit as defined by the PLAN; and (d) In the event the trail easements held by the SMRPD do not exceed the maximum as described in the PLAN, or the SMRPD is willing to stipulate to a sufficient and mitigated trail plan which is subordinate to the Conservation Easements, then the budget and planning **MUST** include a portion of the endowment or pass through budgetary fees to the SMRPD to properly install, manage and maintain the recreational trails within the defined easements. These same considerations should be held for other Core Areas which may also possess a legal obligation to trail users, unknown at this time.

In closing I wish to say that exposure creates endearment, endearment creates preservation. Let's convince the Public (Taxpayers) that they have invested wisely by correctly **amending** Alternative 2 and 3, creating a legally sufficient document which will not need to be challenged in the future. Allowing such a legally insufficient document such as the PLAN/DEIR Alternatives 2 and 3 without the aforementioned amendments, would only invite years of litigation when the Public (AKA Taxpayers) realize they've been duped and their rights have been taken away by "THEM".

Thank you,



Dana A. Judd

Response to Comment Letter 35: Dana Judd – 2/6/15

Comment 35-1 Response

Comment: The commenter states concern that the limitations to public access on the Preserves is inconsistent with what was presented to the voters during the renewal of the M2 sales tax. The commenter states that the campaign emphasized the Public's (VOTER'S) opportunity to enjoy these preserved lands.

Response: Comment Noted. The Transportation Investment Plan, which was included as part of the voter pamphlet, does not emphasize public access to these Preserves. Nevertheless, OCTA recognizes the importance of public access on the Preserves and has been collaborating with the wildlife agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As discussed in the Plan, public access will be provided on some of the Preserves if access is consistent with the Plan's biological goals and objectives. The primary purpose of acquiring the Preserves is to meet the biological requirements of the NCCP/HCP. Please see Master Response A and B (9-218 to 9-226) of this Final EIR/EIS in relation to public access and recreation on the Preserves. The Preserve specific RMPs will outline the public access for each Preserve. For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 35-2 Response

Comment: The commenter states that the County Specific Plans, such as the Silverado Modjeska Specific Plan, include trails that must be dedicated upon the trigger of development.

Response: As discussed above as part of the Master Response C (pages 9-226 to 9-229) of this Final EIR/EIS, OCTA will coordinate with local agencies and stakeholder groups to address regional trail planning to the extent that proposed trails identified through regional trails planning efforts intersects with the OCTA Preserves. The Silverado Modjeska Specific Plan includes language that enables the County of Orange (County) to exact trail designations and other public uses through the conditions of an approval process if a property owner triggered the entitlement process by developing the property. Since OCTA acquired the Preserves for conservation purposes and not development, there was no triggering of the entitlement process which would require the County to exact trails. The County is not a party in the approval process for the NCCP/HCP or related EIR/EIS. However, OCTA will coordinate with the County to the extent that regional trail planning efforts do not conflict with OCTA's primary objective of maintaining and protecting its Preserves for their habitat value.

Comment 35-3 Response

Comment: The commenter states that the Plan and EIR/EIS does not address the Silverado Modjeska Specific Plan, even though there is the MacPherson Preserve and Lower Silverado Canyon restoration project within these area covered by this Specific Plan.

Response: The MacPherson Preserve had not been acquired prior to the Draft EIR/EIS being circulated and the Final EIR/EIS includes a discussion and analysis of the MacPherson Preserve. The restoration project sponsors are responsible for addressing environmental issues for their

restoration projects therefore, the potential environmental effects of the Lower Silverado restoration project are not addressed in the Plan EIR/EIS.

Comment 35-4 Response


Comment: The commenter states that the Alternatives 2 (Proposed Plan) and Alternative 3 (Reduced Plan) are flawed and request an amendment to include trails included in the Silverado Modjeska Specific Plan to clearly added to the Plan.

Response: OCTA recognizes the importance of public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 36: Julie London – 2/6/15

COMMENT FORM

#11		<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Friday, February 06, 2015 6:22:37 PM Last Modified: Friday, February 06, 2015 6:36:53 PM Time Spent: 00:14:16 IP Address: 68.183.134.19</p>
------------	---	--

PAGE 1

Q1: Name	Julie London
Q2: Title	<i>Respondent skipped this question</i>
Q3: Organization or business (if applicable)	<i>Respondent skipped this question</i>
Q4: Address	2 Thicket
Q5: City	Irvine
Q6: State	Ca
Q7: Zip	92614
Q8: Phone	949-872-1461
Q9: Fax	<i>Respondent skipped this question</i>
Q10: E-Mail	Hoodie3x@yahoo.com

1 / 2

COMMENT FORM

Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

Thank you for accepting this form slightly late. I was only told today's date, not a time deadline, and have just returned home from work.

36-1 I keep my horse at Wild Oaks Ranch, just adjacent to what is now your property in Trabuco Canyon. This property was purchased by you, on behalf of the OC residents in order to preserve it, as it's been preserved for many, many years. Your purchasing of it should not change the ability of the OC residents from enjoying it as has been done by hikers and equestrians for years. Preserve it by not allowing building upon it! That is what most people consider preservation!

Preservation does not mean throwing a fence and locked gate suddenly on it, and forbidding its natural enjoyment. If that were the case, then nobody would be able to use our National Parks. In the Parks, people are encouraged to use the land, with rules to respect it. That is respectful to the land, and to the citizens.

Your restrictions now, and proposed, are unnecessary and disrespectful to the community. Please open this land for hikers and equestrians to use at will. Thank you. Julie London

Response to Comment Letter 36: Julie London – 2/6/15

Comment 36-1 Response

Comment: The commenter requests a greater degree of public access on the OCTA Preserves within the Trabuco Canyon area and states that the restrictions on the Preserves are unnecessary and disrespectful to the community.


Response: OCTA recognizes the importance of public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

As previously discussed under response 24-1 and 26-1 regarding the recommendation to permit more open access on the OCTA Preserves, there is a principle difference between public parks and OCTA's Preserves. The public parks are required to be open to the public for passive recreational purposes. OCTA Preserves, on the other hand, were acquired to be conserved in their natural state to mitigate impacts to similar land from M2 freeway projects. It was OCTA's primary purpose when conserving land. Public access, while important, is secondary and must be provided in a manner which is not inconsistent with the primary purpose of the Preserves. These Preserves have strict requirements from the Wildlife Agencies related to protection of the biological resources. Because of this, OCTA did undertake some additional fencing and installation of gates at some of the Preserves when activities that were detrimental to the protection of the biological resources were discovered. These included trespassing, degradation of cactus, illegal dumping, and tree cutting. OCTA had no choice but to prohibit public access when the aforementioned issues were discovered that were incompatible with OCTA's preservation goal.

The degree of public access will be established on each Preserve based on a number of factors. Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 37: Vanessa Mascia – 2/6/15

COMMENT FORM

#6		<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Friday, February 06, 2015 11:20:06 AM Last Modified: Friday, February 06, 2015 11:32:33 AM Time Spent: 00:12:27 IP Address: 166.176.59.98</p>
-----------	---	--

PAGE 1

Q1: Name	Vanessa Mascia
Q2: Title	<i>Respondent skipped this question</i>
Q3: Organization or business (if applicable)	Horse ranch
Q4: Address	<i>Respondent skipped this question</i>
Q5: City	Trabuco canyon
Q6: State	<i>Respondent skipped this question</i>
Q7: Zip	<i>Respondent skipped this question</i>
Q8: Phone	714-785-3982
Q9: Fax	<i>Respondent skipped this question</i>
Q10: E-Mail	<i>Respondent skipped this question</i>

1 / 2

COMMENT FORM

Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

37-1 Considering the topic of conversation at the last 3+ meetings has revolved around funds. My suggestion is to charge an annual pass for hikers and equestrians to purchase and must carry on them, either a photo card provided by Octa or something else. This is for the Ferber and O'Neil Oaks properties. They would be required to carry it on them at all times while on the property they have the annual pass for. Gates could be opened at dawn and closed at dusk in accordance with the surrounding parks.

Riding trails will be clearly marked and trails not to be used should be clearly designated as well. If someone is caught off the designated trail, they will be fined. If caught twice they lose their pass privileges.

Passes can be as much as 100.00 for a year. This will allow OCTA funds for maintaining the property as well as allowing people the pleasure to ride/hike it.

This will also allow for self -policing. People care for this land very much and wouldn't want anything or anyone to take it away from them again.

Obviously, there are details that need to be worked out but I'm sure we can figure it all out.

Thank you,
Vanessa

Response to Comment Letter 37: Vanessa Mascia – 2/6/15

Comment 37-1 Response

Comment: The commenter makes recommendations on how an annual pass could be used as method for allowing public access on the OCTA Preserves. The commenter also suggests fining and revoking passes should visitors use undesignated trails.

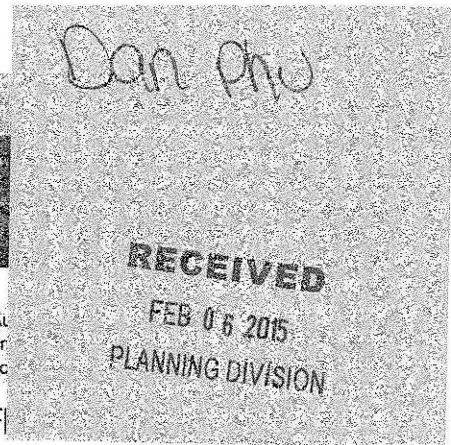
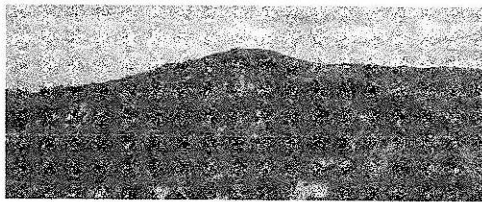
Response: As summarized on Table 9-2 of this Final EIR/EIS, a permit system for access is under consideration as one of the future options but OCTA would need to continue to gauge the success of the current docent-led approach as it relates to protection of the biological resources.

In regard to the remark on limited use of designated trails for hiking and riding, OCTA has taken on this approach. For instance, the docent-led public hike and equestrian ride tours are only permitted on previously used access roads that had minimal impacts to the biological resources.

OCTA recognizes the importance of public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed, and an annual pass is an option that will be considered.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 38: Gunnar McGriff – 2/6/15



COMMENT FORM

Orange County Transportation Authority
Natural Community Conservation
Draft Environmental Impact Report

COMMENTS WILL BE ACCEPTED UNTIL 5:00 PM ON FEBRUARY 11, 2015

Privacy Notice: Please be aware that your entire comment—including your personal information—will be included in the administrative records for the proposed project, and will be part of the final EIR/EIS.

Please Print

Name Gunnar McGriff Title _____

Organization or business (if applicable) _____

Address 20301 Sycamore Drive--#187

City Trabuco Canyon State CA Zip 92678

Phone 949-212-4541 Fax _____ E-Mail gunnarjmcgriff@gmail.com

This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

38-1

I support the OCTA plan for Ferber Ranch. I'd like to be trained as a docent.

Please allow training for those of us in the community who love this land are glad you helped preserve it. We will support your cause and help educate people.

Please allow docent-led hikes and horse-riding on the preserve. These can be done as they are in the Irvine Conservancy and elsewhere--in a way that is responsible and that places preservation of habitat first. I understand that there will be firm rules about which roads/trails are allowed and support that. Allowing limited use will greatly increase the local community support. We will be your volunteer army of educators and docents. Train us. Let us help!

Thank you for considering my views.



Response to Comment Letter 38: Gunnar McGriff – 2/6/15

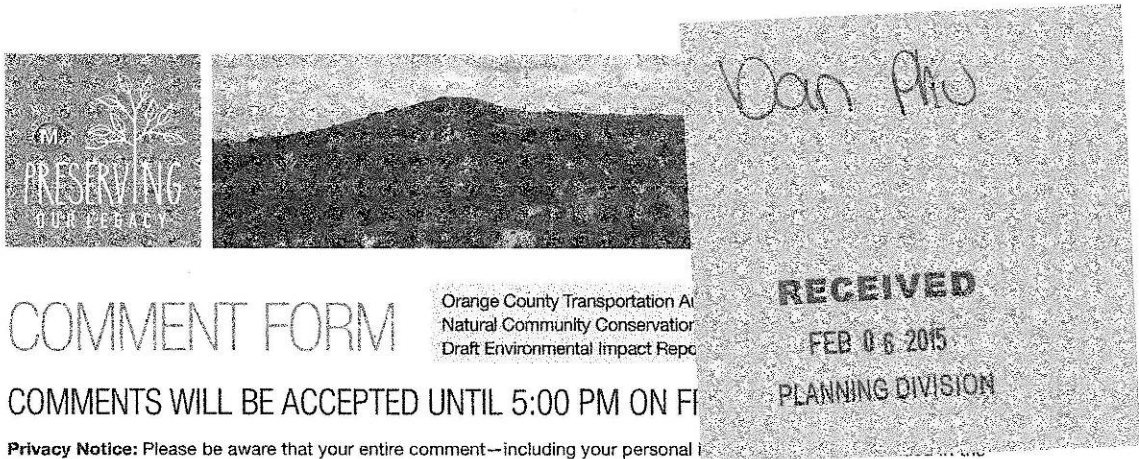
Comment 38-1 Response

Comment: The commenter appears to agree that a docent led program for the Ferber Ranch Preserve is a good option to implement.

Response: OCTA recognizes the importance of public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. OCTA will continue to reach out the local community to help support the docent-led equestrian events. As previously discussed, in accordance to the draft RMPs, OCTA may be opened to more community partnership which is a similar model to what the Irvine Ranch Conservancy has implemented over the years.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 39: Patrick McGriff – 2/6/15



COMMENT FORM

Orange County Transportation Authority
 Natural Community Conservation
 Draft Environmental Impact Report

COMMENTS WILL BE ACCEPTED UNTIL 5:00 PM ON FEBRUARY 10, 2015

Privacy Notice: Please be aware that your entire comment—including your personal information—will be maintained in administrative records for the proposed project, and will be part of the final EIR/EIS.

Please Print

Name Patrick McGriff Title _____

Organization or business (if applicable) _____

Address 20301 Sycamore Drive--#187

City Trabuco Canyon State CA Zip 92678

Phone 949-702-2782 Fax _____ E-Mail pmcgriff@aol.com

This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

I will keep this short and sweet. We understand and support your OCTA mission.

There is a lot of misunderstanding about the Ferber property.

I've done what I can to explain it to my neighbors and build support. I frame it as positively as possible and voice my support for the acquisition and preservation of these lands. I will continue to do anything I can to help.

I know that preservation is Job #1. To that end, please consider development of a full docent training program so that I can formally participate and continue to support the OCTA mission. I want to educate my neighbors so that they understand what a gift this is to all of us! And please consider a plan that permits fire-road hikes and horse rides that are docent-led: this can be done responsibly and will really get buy in from the community!

39-1

Response to Comment Letter 39: Patrick McGriff

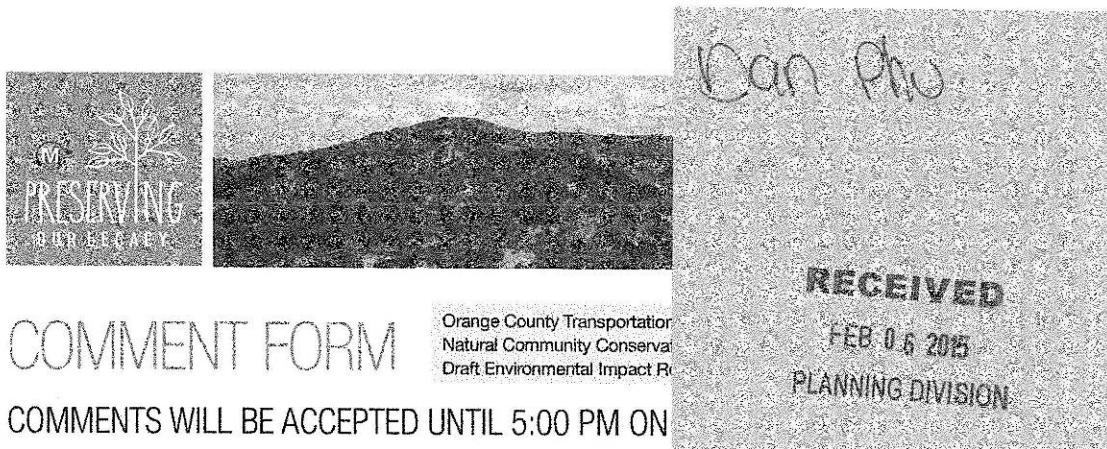
Comment 39-1 Response

Comment: The commenter appears to agree that a docent led program for the Ferber Ranch Preserve is a good option to implement.

Response: OCTA recognizes the importance of public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. OCTA will continue to reach out the local community to help support the docent-led equestrian events. As previously discussed, in accordance to the draft RMPs, OCTA may be opened to more community partnership which is a similar model to what the Irvine Ranch Conservancy has implemented over the years.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 40: Sina McGriff – 2/6/15



COMMENT FORM
 Orange County Transportation Authority
 Natural Community Conservation
 Draft Environmental Impact Report

COMMENTS WILL BE ACCEPTED UNTIL 5:00 PM ON

Privacy Notice: Please be aware that your entire comment—including your personal information—will be included in the administrative records for the proposed project, and will be part of the final EIR/EIS.

Please Print

Name Sina McGriff Title _____

Organization or business (if applicable) _____

Address 20591 Trabuco Oaks Drive--#413

City Trabuco Canyon State CA Zip 92678

Phone 949-702-3240 Fax _____ E-Mail geislandi@gmail.com

This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

40-1

I scanned the lengthy reports and have been following the OCTA acquisition and process for the Ferber and other Trabuco Canyon properties from the beginning. Please let us participate in a full, formal docent training program. These work very well elsewhere and there are numerous volunteers here in our community who are willing to commit to training and dedicated hours to help, as needed. Also, please consider limited use of the lands for hiking and riding. It is understood that there will be strict rules about use on designated fire roads, only. This approach has worked well, elsewhere, including the Irvine Conservancy. Please consider that model, so that community support and education about the preserve and OCTA grows over time and into the future.



Response to Comment Letter 40: Sina McGriff – 2/6/15

Comment 40-1 Response

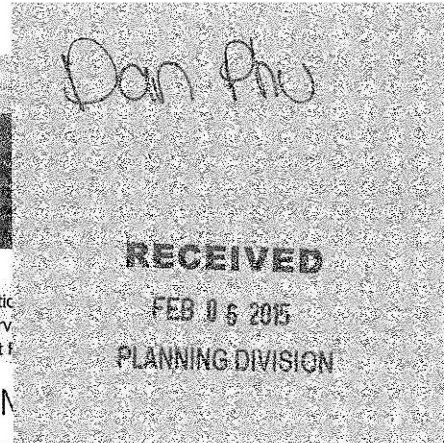
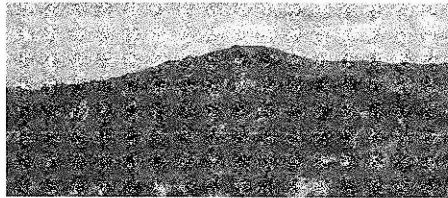
Comment: The commenter appears to agree that a docent led program for the Ferber Ranch Preserve is a good option to implement. The commenter also recommends restricting access to designated fire roads and considering the model used for the Irvine Ranch Conservancy.

Response: OCTA recognizes the importance of public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. OCTA will continue to reach out the local community to help support the docent-led equestrian events. As previously discussed, in accordance to the draft RMPs, OCTA may be opened to more community partnership which is a similar model to what the Irvine Ranch Conservancy has implemented over the years.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>).

In regard to the remark on limited use of the lands for hiking and riding on designated fire roads, OCTA has used this approach. For instance, the docent-led public hike and equestrian ride tours are only permitted on previously used access roads that had minimal impacts to the biological resources. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 41: Sveinn and Sigrid Thordarson – 2/6/15



COMMENT FORM

Orange County Transportatic
Natural Community Conserv
Draft Environmental Impact I

COMMENTS WILL BE ACCEPTED UNTIL 5:00 PM ON

Privacy Notice: Please be aware that your entire comment—including your personal information—will be included in the administrative records for the proposed project, and will be part of the final EIR/EIS.

Please Print

Name Sveinn and Sigrid Thordarson Title _____

Organization or business (if applicable) _____

Address 20358 Trabuco Oaks Drive--#172

City Trabuco Canyon State CA Zip 92678

Phone 949-589-4103 Fax _____ E-Mail sveinn@cox.net

This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

41-1

Please allow for equestrian riding on the Ferber Preserve. Our local riders want to participate in docent training so that they can lead rides there and educate people on the flora and fauna. Done responsibly, this is consistent with OCTA goals. This is an active community with a strong tradition of volunteerism. We are a great asset and resource for OCTA. Please use us. Let us participate. Thank you.



Response to Comment Letter 41: Sveinn and Sigrid Thordarson – 2/6/15

Comment 41-1 Response


Comment: The commenter requests that OCTA allow equestrian riding on the Ferber Ranch Preserve. The commenter also states that they are interested in becoming trained as a docent and that docent events would be consistent with OCTA goals.

Response: OCTA recognizes the importance of public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. OCTA will continue to reach out the local community to help support the docent-led equestrian events. As previously discussed, in accordance to the draft RMPs, OCTA may be opened to more community partnership which is a similar model to what the Irvine Ranch Conservancy has implemented over the years.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 42: Courtney Keppelman – 2/7/15

COMMENT FORM

<p>#13</p> 	<p>COMPLETE</p> <p>Collector: Web Link 1 (Web Link) Started: Saturday, February 07, 2015 10:51:54 AM Last Modified: Saturday, February 07, 2015 10:59:50 AM Time Spent: 00:07:55 IP Address: 166.176.59.218</p>
--	--

PAGE 1

Q1: Name	courtney keppelman
Q2: Title	<i>Respondent skipped this question</i>
Q3: Organization or business (if applicable)	<i>Respondent skipped this question</i>
Q4: Address	woodland drive
Q5: City	laguna beach
Q6: State	ca
Q7: Zip	92651
Q8: Phone	9493060859
Q9: Fax	<i>Respondent skipped this question</i>
Q10: E-Mail	ckeppelman@hotmail.com
<p>Q11: This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.</p> <p>42-1 Please help Orange County conserve its equestrian character. The horses give Trabuco Canyon its distinctive charm and character. Horses share the land well with deer and other wildlife. The fencing you have built is damaging the migratory routes of the deer and causing them to get trapped on the road which endangers all the drivers on Trabuco Canyon Road. The fire roads must be kept clear so the Trabuco Canyon land will never be pristine. Unlike mountain bikers and hikers, equestrians do not litter or make excessive noise which would scare wildlife. Please open the fire roads to equestrians. Thank you! Courtney Keppelman</p>	

Response to Comment Letter 42: Courtney Keppelman – 2/7/15

Comment 42-1 Response

Comment: It is the commenter's opinion that fencing of the Preserves impacts migratory routes of the deer and causes them to get trapped on the road which endangers drivers on Trabuco Canyon Road adjacent to the Ferber Ranch Preserve. The commenter also requests more recreational opportunities and trails in Trabuco Canyon area.

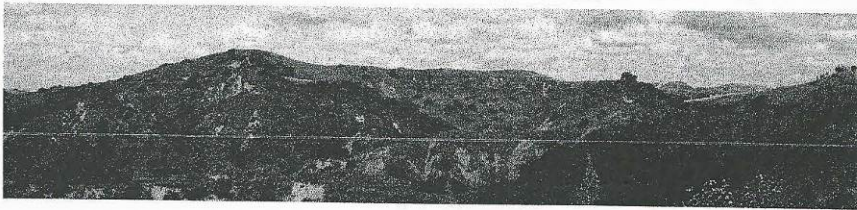
Response: As background, the fencing of certain parts of this Preserve was necessitated due to trespassing, degradation of biological resources, and other illegal activities that were incompatible with OCTA's preservation goal.

OCTA installed fencing around the exterior of certain parts of Ferber Ranch using a three-strand, smooth wire. Fence type and placement were strategically placed related to the aforementioned issues, as appropriate, while enabling wildlife movement. OCTA coordinated (before and after the fencing effort) with the appropriate staff at the Wildlife Agencies to determine the appropriate height and location of the fencing. In addition, OCTA had previously received public concerns about the fencing. As part of the ongoing management activities, OCTA coordinates with the Preserve's biological monitor and Wildlife Agencies to determine if adjustments are needed.

Regarding more recreational opportunities, as previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 43: Helga Thordarson – 2/12/15



COMMENT FORM

Orange County Transportation Authority (OCTA) Measure M2
 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)
 Draft Environmental Impact Report/Statement (DEIR/EIS)

COMMENTS WILL BE ACCEPTED UNTIL 5:00 PM ON FRIDAY, FEBRUARY 6, 2015

Privacy Notice: Please be aware that your entire comment—including your personal information—will be included in the administrative records for the proposed project, and will be part of the final EIR/EIS.

Please Print

Name Helga Thordarson Title Dr.

Organization or business (if applicable) _____

Address 20301 Sycamore Drive--#187

City Trabuco Canyon State CA Zip 92678

Phone 949-735-4203 Fax _____ E-Mail helgathordarson@gmail.com

This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County. Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

43-1

Thank you for the opportunity to comment on this important phase of the Trabuco OCTA property. I am a long-time resident of the canyons and participated on every ride/hike event offered on the Ferber property. I am a strong supporter of OCTA's preservation efforts in OC. I offer my time to assist in community outreach and development of a recreation plan that supports the primary OCTA goals of habitat preservation. I have already reached out to neighbors and friends in our community to educate them on the process and goals of OCTA at the Ferber Ranch. I see growing support and understanding. I look forward to participating in formal community education, when the time comes.

I also hope for two things:

Firstly, I would like to receive training in a formal docent program. This will enable dedicated volunteers to support



ORANGE COUNTY TRANSPORTATION AUTHORITY



43-1
cont.

the OCTA's mission by promoting a full understanding and appreciation for the preserve in our community. This will help support responsible use and community involvement.

Secondly, I hope to participate and contribute, as possible, to development of a responsible recreation plan that that preserves this natural resource, while allowing restricted use congruent with the OCTA mission (docent-led small group hikes and equestrian rides that use designated fire roads only, for ex.) I will volunteer for formal training, abide by all OCTA rules, and do all I can to protect and preserve this OC treasure. Let's work hand-in-hand and make this OCTA venture a model for responsible preservation and community collaboration.

Thanks very much!

Thank you for your comments. If you need more space, please feel free to attach additional sheets as necessary. This form is available online at www.OCTA.net/ConservationPlan. Comments must be received by 5:00 PM on Friday, February 6, 2015. Comments received after this date and time will not be considered in the Final DEIR/EIS. Comments may be submitted via the following means:

US MAIL: Dan Phu OCTA Attn: M2 NCCP/HCP & DEIR/EIS 550 South Main Street P.O. Box 14184 Orange, CA 92863-1584	E-MAIL: octa_nccp_hcp_comments@octa.net	FAX: (714) 560-5795
---	---	------------------------



Response to Comment Letter 43: Helga Thordarson – 2/12/15

Comment 43-1 Response

Comment: The commenter voices support of OCTA's preservation efforts. The commenter also requests that they receive training in a formal docent program and to participate and contribute to the development of a responsible recreation plan.

Response: OCTA recognizes the importance of public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. OCTA will continue to reach out the local community to help support the docent-led equestrian events. As previously discussed, in accordance to the draft RMPs, OCTA may be opened to more community partnership which is a similar model to what the Irvine Ranch Conservancy has implemented over the years.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 44: Delma Johnson – 2/14/15**Angel Lin**

From: Delma Johnson <delmajohnson17@gmail.com>
Sent: Saturday, February 14, 2015 10:11 PM
To: OCTA NCCP_HCP_Comments
Subject: Fwd: COMMENT TO EIR/ EIS NATURAL COMMUNITY CONSERVATION PLAN

Begin forwarded message:

From: Delma Johnson <delmajohnson17@gmail.com>
Date: February 14, 2015 at 9:29:58 PM PST
To: Delma Johnson <delmajohnson17@gmail.com>
Subject: Fwd: COMMENT TO EIR/ EIS NATURAL COMMUNITY CONSERVATION PLAN

44-1

This comment was mailed, hand written. Last day to address concerns. I was fast reading EIR till 3:00 am. My computer was unplugged, the room was being painted. I ended up hand writing and mailed. Several neighbors have been turned out of Ferber property and told to go back to O'Neill park. The canyon is on lockdown when it comes to connective links. The more I look into this OCTA EIR, the more overreaching of our historical transportation links both walking or riding it is. Regional trail links were mapped in 1990 and given to Orange County planning under the FTSP 1. Effective creation of community pedestrian system in lieu of sidewalks. 2. These trail links were to double as fire prevention, provide access routes for firefighting equipment to more remote areas and used if access blockage as in case of fire or flooding. I personally walked trails with county representative and requested Orange County to assign a county person to oversee our effort. Jeff Dickman was named 1991. The county reviewed and determined certain links were important to the future development of the canyon and would protect inter canyon access to enhance a unique community. The Foothill Trabuco Specific Plan 1991 incorporated this study. The community input into the Foothill Trabuco Specific Plan Is within the Recreation component(Local,Regional,Trail Easements). Within Ferber property the link is defined from Rose Cyn road connecting to Trabuco oaks dr. And continuing north toward Hamiton Truck Trail. From this connection along Rose Cyn Rd to O'Neill regional park. The county selected a few necessary links throughout the community, check out FTSP Recreational Component. We have done our homework, taken due diligence. We all need to make this process accountable. (1) Is the OCTA EIR/EIS compliant with the Foothill Trabuco Specific Plan ?. (2.) Impact to the community. Our trail links are synonymous to a sidewalk transportation system. This must be implemented as a condition of EIR final draft and approval . This EIR is taking our inter canyon trail links, this does not enhance this unique community, it locks us down. This cannot be mitigated and is leading to loss of property value.

Request STOP any further action to final draft of this plan, UNTILL the community is informed how this major impact will be resolved. The impact of trail links have been resolved in FTSP. The OCTA NEEDS TO INTEGRATE WITH EXISTING AND PROPOSED COUNTY TRAIL SYSTEM TO FACILITATE IMPROVED CIRCULATION. THIS SHOULD BE PART OF ALL NATURAL CONSERVATION COMMUNITY PLANS. YOU CANNOT TAKE FROM TRABUCO TO FAST TRACK YOUR PROJECTS IN OTHER AREAS, WITHOUT DUE PROCESS FROM ALL COMMUNITIES INVOLVED.

1

Conservation is great, you need to fine tune this plan. A lockdown of access will never be acceptable to the foothill community . Solve problem now, don't waste tax dollars ignoring.

Begin forwarded message:

From: Delma Johnson <delmajohnson17@gmail.com>
Date: February 8, 2015 at 8:26:33 PM PST
To: Delma Johnson <delmajohnson17@gmail.com>
Subject: COMMENT TO EIR/ EIS NATURAL COMMUNITY CONSERVATION PLAN

Dated and mailed February 5, 2015

Orange County Transportation Authority (OCTA) Measure M2.
 Natural Community Conservation Plan/Habitat Conservation Plan(NCCP/HCP)
 Draft Environment Impact/Statement(DEIR/EIS)

Delma Johnson Resident 38 years
 Land Owner
 20091 Trabuco Oaks Dr. Box 435
 Trabuco Cyn CA 92678
delmajohnson17@gmail.com

44-1
 cont.

Comments to EIR/EIS

Refer:
 Foothill / Trabuco Specific Plan, Recreation Component. Local, Regional Trails.

Has the Trabuco local, regional riding trail system as defined in the Trabuco Specific Plans, Recreational Component been included in the Natural Communities Conservation Plan.

Conserving natural habitats and the equestrian component of the Trabuco Buffer, Cleveland National Forest and O'Neill Regional Park, has been an ongoing effort to keep connection, not only to the community but also to the Equestrian Heritage of the Specific Plan and Orange County, as a quiet unrestricted, recreational usage.

Along with the migration of our natural wildlife thru our county, the ability for the Trabuco Community to travel on our horses thru these protected areas are also in need of protection.

The Trabuco, Silverado, Modjesca, Rancho Santa margarita, Dove Cyn, Coto de Caza and Orange County, by the thousands, have defined this local and regional Master Trails as a major priority, along with protection of natural land forms within the buffer and natural open space.

Equestrians, Rural residential properties and this complex and so amazing natural Resources of Natural open space is what has given life and energy to protect and preserve by all of Orange County.

Myself, my children, my grandchildren, the Trabuco Community, all who visits, have had the privilege and Sole Healing Experience of our conservation efforts in the Trabuco Buffer.

This conserving of Natural Habitats and the Equestrian Local Community Trail System which connects to the master plan of trails **must be an integral objective** in the effort to preserve / protect.

Our horses are also under threat of extinction in Orange County along with our rural residential usages that supports the protected areas.

PLEASE take time to understand, these usages are intermingled and makes this area most desirable for the best natural outdoor experience in Orange County.

Delma Johnson Resident 38 yrs. Trabuco Cyn.

Response to Comment Letter 44: Delma Johnson – 2/14/15

Comment 44-1 Response

Comment: The commenter voices concerns about the OCTA EIR being in conflict with the Recreational Component of the Foothill Trabuco Specific Plan (FTSP) and requests that OCTA integrates specific trail connections within Trabuco Canyon. Specific questions asked by the commenter include the following: 1) is the OCTA EIR/EIS compliant with the Foothill Trabuco Specific Plan (FTSP), and 2) does the OCTA EIR/EIS creates impacts to the community?

Response: In response to question number one pertaining to the OCTA EIR/EIS being compliant with the FTSP, as discussed above as part of the Master Response C (pages 9-226 to 9-229) of this Final EIR/EIS), OCTA will coordinate with local agencies and stakeholder groups to address regional trail planning to the extent that proposed trails in the FTSP and other regional trails planning efforts intersects with the OCTA Preserves. The intent of the FTSP was to enable the County of Orange (County) to exact trail designations and other public uses through the conditions of an approval process if a property owner triggered the entitlement process. Since OCTA acquired the Preserves for conservation purposes, there was no triggering of the entitlement process which would require the County to approve the NCCP/HCP or related EIR/EIS. However, OCTA will coordinate with the County to the extent that regional trail planning efforts do not conflict with OCTA's primary objective of maintaining its Preserves for their habitat value. The comment is based on a premise that public access existed prior to OCTA's purchase. It did not. Please see Comment 31-1 Response and others above. To briefly reiterate, at the time OCTA acquired the property the prior owner of the property permitted private access to a limited number of private individuals who boarded horses at nearby stables. By definition, public access means access to the general public, not a select group of private individuals, and as noted in many of the above responses, OCTA is working toward permitting true public access to the property. A significant environmental effect is in turn defined as a substantial, or potentially substantial, adverse change in the environment. Eliminating private access to the property by a select group of equestrian users is not an environmental impact. If anything, as noted above, there is substantial evidence that private access, either permitted by the private owner or through trespassing, was causing adverse environmental impacts. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

The comment is based on a premise that public access existed prior to OCTA's purchase. It did not. Please see Comment 31-1 Response and others above. To briefly reiterate, at the time OCTA acquired the property the prior owner of the property permitted private access to a limited number of private individuals who boarded horses at nearby stables. By definition, public access means access to the general public, not a select group of private individuals and as noted in many of the above responses, OCTA is working toward allowing true public access to the property. A significant environmental effect is in turn defined as a substantial, or potentially substantial, adverse change in the environment. Eliminating private access to the property by a select group of equestrian users is not an environmental impact. If anything, as noted above, there is substantial evidence that private access, either permitted by the private owner or through trespassing, was causing adverse environmental impacts. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 45: Delma Johnson – 3/4/15

March 4, 2015

Orange County Transportation Authority (OCTA) Measure m2
 Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)
 Draft Environment Impact/Statement (DEIR/EIS)

To: Dan Phu, Section Manager
 Orange County Transportation Authority
 Attn: m2 NCCP/HCP
 550 South Main Street
 P.O. Box 14184
 Orange, CA 92863-1584

*Please Add Access Comments
 to the RMP.*

OCTA Plan- Impact to Trabuco community- TRAIL ACCESS.

45-1 1. The acquisition of the four parcels (by OCTA in the Foothill Trabuco area) **blocks** historical **local connective riding and hiking trails**. Regional and local Riding and Hiking trails are clearly defined in the FTSP (as adopted by the Board of Supervisors, December 1991) as well as in the **County's Recreational Element of the Orange County General Plan**. These regional and local trails are **shared-used** in design, meaning they are used by walkers, joggers, mountain bicyclists and equestrians besides as exit route during fires, floods and emergency evacuations. Trails are also used for heavy firefighting equipment access into more remote areas.

2. Thirteen families must use Rose Canyon Road to exit the canyon. These families have no secondary exit. All of the Trabuco Village and Trabuco Oaks Ranches also lack secondary exit. Hamilton Truck Trail, with its many families, similarly lacks a secondary access out of the canyon. **OCTA's Ferber property is currently locked.** This lockout has impacted the Trabuco Community by **eliminating** secondary emergency exits in the event of fire, floods or street closure. **Closing the Ferber (and the other three properties) to the community presents a major life threatening liability to our welfare.**

45-2 Families rely on these trails as their backup plan to move people and horses out of harm's way. You may not know that Trabuco Canyon is a **well-established** historical equestrian community **intertwined with the County, its park and trail networks.**

In preserving its community residents have worked (and continue to work) closely and diligently with the County to have concerns and to follow the **Foothill Trabuco Specific Plan**. The **adopted Plan** assures the community is safe, tranquil, **with** unrestricted trail access, **from** - sunrise to sunset. **See FTSP Recreational Component, Local trails.**

OCTA must abide by the Foothill Trabuco Specific Plan and also address how it will insure that these existing and planned trails are not negatively impacted as part of the goal to own and operate the four parcels. The many local and regional riding and hiking trails connect our community to other County Master Plan Trails which link us to other open space areas including the Cleveland National Forest. Preserving and developing these trails is a goal of the County and the community and this must be a priority in the EIR/EIS Natural Community Conservation Plan.

Below is a list of the OCTA's parcels which, if closed off to the public, will negatively impact the public's use and enjoyment of these routes in both the immediate and surrounding open space areas.

Ferber Parcel

E. Hickey Trail-Connects Hamilton Truck Trail to Trabuco Oaks Drive and on to Rose Canyon Road, Ferber Parcel). **This connection needs prioritizing. High Priority**

I. Rose Canyon Trail

J. Unnamed Trail

L. Canyon Connector Trail (Part of this trail connects Trabuco Oaks Drive to Rose Canyon Road, Ferber Parcel). This **connection needs prioritizing**, summer brings the threat of fires. This connection gives availability to a backup plan to move horses, animals and people if needed between these two roads. Also gives evacuation backup plans to those living on Hamilton Truck Trail, Trabuco Oaks Drive, Rose Canyon Road, Trabuco Village and Trabuco Ranches. **High Priority**

45-2
cont.

O'Neill Oaks Parcel

C. Arroyo Trabuco Trail (the east arm of the Coyote Connector Trail)

N. Coyote Connector Trail (part of Vulture Craggs Trail Regional Riding and Hiking Trail, which is planned to link O'Neill Regional Park to the Cleveland National Forest.

Hafen Parcel

I. Canyon Connector Trail (part of the Vulture Craggs Trail Regional Riding and Hiking Trail, which is Planned to link O'Neill Regional Park to the Cleveland National Forest.

Saddle Creek South Parcel

O. Another possible impact may occur to the Bridlewood View Lookout (at the North end of the View Point Spur Trail)

These **Foothill Trabuco Riding and Hiking Trails will be impacted** if OCTA, OCTA EIR denies normal sunrise to sunset access to trail users.

Comments are being made by Input from Trabuco Community.

Contact person:

Delma Johnson 38 year resident Trabuco Canyon. Delmajohnson17@gmail.com

Trabuco Equestrian Representative 1989, 1990 FTSP.
Submitted local trail maps to Orange County Planning in 1990 for inclusion in the Foothill/Trabuco Specific Plan.

Property Owner in Trabuco Canyon for 38 Years.

Member of Equestrian Trails Inc. since 1991.

45-3 Retired 2002 State of California (Caltrans, Health and Welfare).

Rode Foothill Trabuco Trails from 1977 to 2002.

Advocate to educating our youth to gain hands- on experience with the world of Horses and the rural outdoor experience.

Trabuco Oaks Ranch- Bred Morgan Horses.

I am now 68 years old and still looking forward to working with OCTA and the County to securing, in perpetuity, trail easements in the Foothill Trabuco Specific Plan area.

The many different trail users and equestrians of the Foothill Trabuco area need your support, if we are unable to keep and develop these trails, we as equestrians, will be unable to ride to the nearby forest, O'Neill Regional Park and several other destinations. Ours is a place with recreation, open space and enhanced by rural residential zoning. I believe these uses, with care and planning, can be protected and even expanded as **part of The Natural Community Conservation Plan**, if OCTA will respect the goals in the Foothill Trabuco Specific Plan. Help us grow our trails and keep our community, children and horses happy and safe.



Response to Comment Letter 45: Delma Johnson – 3/4/15

Comment 45-1 Response

Comment: The commenter expresses concerns that OCTA's acquisition has blocked trail access and connectivity within four parcels and/or evacuation routes in the event of emergencies.

Response: While public trails within these parcels are shown in the FTSP as part of a proposed public trail system within the Orange County General Plan, the parcels were private property when acquired by OCTA and trails located thereon were not part of the trail system. The FTSP and the General Plan are planning documents for establishment of a public trail system on private property when and if development occurs on the property. They enable the County to some degree to condition development of private property to include public trails, which the County would maintain. Simply showing the proposed public trails in a specific plan or general plan does not in and of itself make them public trails. The County cannot procure private property for public use by merely showing public trails in its planning documents. To the extent that access may be necessary through the Preserves in the event of an emergency, OCTA will cooperate with residents and first responders in providing such access. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 45-2 Response

Comment: The commenter asserts that secondary access to/from several residences is blocked due to the gate at Ferber Ranch being locked. The commenter also identifies how the OCTA Preserves intersect with the trail segments included in the FTSP Recreational Element.

Response: The community has not had the legal right to cross the lands in question in the past. OCTA has not changed that situation through its acquisition and management of the lands. It is OCTA's understanding that access to some trails was granted to certain individuals who either knew previous property owners/lessees or the owners were not aware their property was being accessed. The Trabuco Canyon Preserves acquired by OCTA were previously held under private ownership and there was no formal granting of public access on any of these properties.

It is important to note that the majority of the Preserves that OCTA owns are largely surrounded by private properties with limited or no public access. OCTA must keep this in mind when permitting any sort of access on its Preserves as to not inadvertently encourage trespassing onto adjacent private properties. OCTA will continue to work with neighbors to determine whether there may be a possible accommodation of their interests.

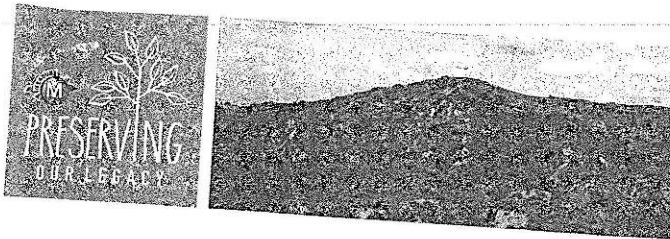
OCTA will consider the commenters suggestions for trail access and priority. However, OCTA cannot assign priorities or undertake actions that would jeopardize the preservation of this land as habitat or interfere with species conservation efforts. However, OCTA will coordinate with the County to the extent that regional trail planning efforts do not conflict with OCTA's primary objective of maintaining its Preserves for their habitat value. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment 45-3 Response

Comment: The commenter provides contact information.

Response: Comment noted. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 46: Rocky Brown – 3/20/15



Dan Phu

COMMENT FORM

Orange County Transportation,
Natural Community Conservati
Draft Environmental Impact Reg

COMMENTS WILL BE ACCEPTED UNTIL 5:00 PM ON F

Privacy Notice: Please be aware that your entire comment—including your persona
administrative records for the proposed project, and will be part of the final EIR/EIS.

RECEIVED

MAR 20 2015

PLANNING DIVISION

Please Print

Name Rocky Brown Title _____
 Organization or business (if applicable) ETI 357 ; Wild Oaks Ranch
 Address 275 Revere Way
 City NB State CA Zip 92660
 Phone 949-233-4262 Fax _____ E-Mail Pianorocky3@gmail.com

This is your chance to comment on what was analyzed in the DEIR/EIS conducted for the OCTA NCCP/HCP for Orange County.
Your input is greatly appreciated. To ensure your comment is considered, please write legibly.

We have been riding on the Forber Ranch
 Property for over 20 years. We are more indigenous
 to the area than all the fences, Trucks and Patrols
 than the OCTA. We are stewards of this land
 and protect & value its unique qualities & beauty.
 IT is beyond our comprehension why the OCTA
 has not only denied us access to this AREA, BUT has
 aggressively BULLIED us. Some of the Patrols have
 said to us "There is no reason why we shouldn't
 be allowed to ride the property". They said, "The
 OCTA is blowing smoke up our asses."

46-1

We find it offensive that we pay taxes to
 keep us off of the land we treasure + protect!
 It is a huge injustice and reprehensible
 to exclude us the equestrians + citizens from
 the land we love, treasure + protect!

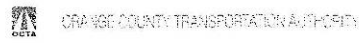
46-1
cont.

Thank you for your comments. If you need more space, please feel free to attach additional sheets as necessary. This form is available online at www.OCTA.net/ConservationPlan. Comments must be received by 5:00 PM on Friday, February 6, 2015. Comments received after this date and time will not be considered in the Final DEIR/EIS. Comments may be submitted via the following means:

US MAIL:
 Dan Phu
 OCTA
 Attn: M2 NCCP/HCP & DEIR/EIS
 550 South Main Street
 P.O. Box 14184
 Orange, CA 92863-1584

E-MAIL:
octa_nccp_hcp_comments@octa.net

FAX:
 (714) 560-5795



Response to Comment Letter 46: Rocky Brown – 3/20/15

Comment 46-1 Response

Comment: The commenter provided input on the Ferber Ranch Preserve as it relates to previous equestrian access. The commenter also noted that tax dollars are being used to purchase and patrol the OCTA Preserves, and taxpayers should have access to the land.

Response: When OCTA acquired this Preserve, there was fencing on the perimeter of the property. OCTA did undertake some additional fencing of this Preserve when activities were discovered that were detrimental to the biological resources. These included trespassing, degradation of cactus, illegal dumping, and tree cutting. Due to the aforementioned issues, OCTA was compelled to increase patrol of the Preserve.

Regarding taxpayers being able to access the Preserves, the OCTA Preserves are conservation properties. It is correct that these Preserves were purchased with County sales tax money. However, the main purpose of these funds was to acquire mitigation properties in exchange for the M2 freeway project improvements.

In addition, these Preserves will not be part of the county public parks system. The preserves require a higher level of conservation protection and stewardship. Some of the reasons these lands were protected include wildlife connectivity, presence of sensitive species, and valuable habitat.

Previous access to OCTA Preserves by the neighboring community does not constitute a public easement across the OCTA Preserves for continued and unfettered access, but OCTA recognizes the importance of allowing an appropriate level public access on the Preserves and, as stated earlier, has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. As previously discussed, due to request from the community and high participation of the docent-led equestrian riding events, OCTA has increased the frequency for 2016 through partnership with local equestrian groups such as Equestrian Trails, Inc. at some of the OCTA Preserves. Table 9-2 of this Final EIR/EIS summarizes the current and future access options and public access challenges are discussed.

Additional information related to the framework and guidelines for defining public access on the Preserves are discussed on pages 9-218 to 9-226 of this Final EIR/EIS (Master Responses A and B). For detailed information related to access on the OCTA Preserves, please refer to draft RMPs (<http://www.octa.net/RMP>). No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 47: Delma Johnson – 4/1/15

To: DAN KAU OCTA
To EOC Committee

From: Delma Johnson Bx 435, Trabuco Cyn CA 92678

delmaJohnson17@gmail.com
949-858-0187

Foothill Trabuco Specific Plan (FTSP):

Section I, Page 1: Introduction: Authorization and Purpose

48-1

Please Add to RMP

Delma Johnson

In August 1988, the Orange County Board of Supervisors directed the Environmental Management Agency (EMA) to convert the then-existing, policy-level Foothill/Trabuco Feature Plan into a regulatory, zoning-level Specific Plan. The purpose of the Specific Plan effort was to set forth goals, policies, land use district regulations, development guidelines, and implementation programs in order to preserve the area's rural character and to guide future development in the Foothill/Trabuco area.

This document, in conjunction with the Orange County Zoning Code and other applicable ordinances, represents the Specific Plan for the Foothill/Trabuco area. It has been prepared in accordance with California Government Code (Sections 65250, et seq.). Unless otherwise provided for within this document, all future development in the Specific Plan Area must be found consistent with the Specific Plan Components, the Land Use District Regulations and the Development and Design Guidelines.

Section I, Page 5: Specific Plan Goals

1.0 Specific Plan Goals

47-1
cont.

- a. Rural Character/Forest Buffer: To preserve the rural character of the area and provide a buffer between urban development and the Cleveland National Forest.
- b. Resource Preservation: To preserve significant landform, biological and scenic resources.
- c. Development Potential: To ensure at least some development potential on each individual property.
- d. Circulation/Infrastructure: To provide for a circulation system and other infrastructure adequate to serve the ultimate level of development permitted.
- e. Equestrian/Recreational Opportunities: To provide equestrian and other recreational opportunities.

Section I, Page 8: Equestrian/Recreational Opportunities

5) Equestrian/Recreational Opportunities:

- a) Provide for a local riding and hiking trail system which includes connections to Regional Riding and Hiking Trails as designated on the Master Plan of Regional Riding and Hiking Trails of the Recreation Element of the General Plan.
- b) Preserve the Arroyo Trabuco/Trabuco Creek as permanent open space in order to: 1) provide a link between O'Neill Regional Park and the proposed Upper Trabuco Canyon Regional Park within the Cleveland National Forest; and 2) provide a critical link of the "mountains-to-the-sea" riding and hiking trail along Trabuco Creek as designated on the Master Plan of Riding and Hiking Trails in the Recreation Element of the General Plan.

Section II, Page 33:

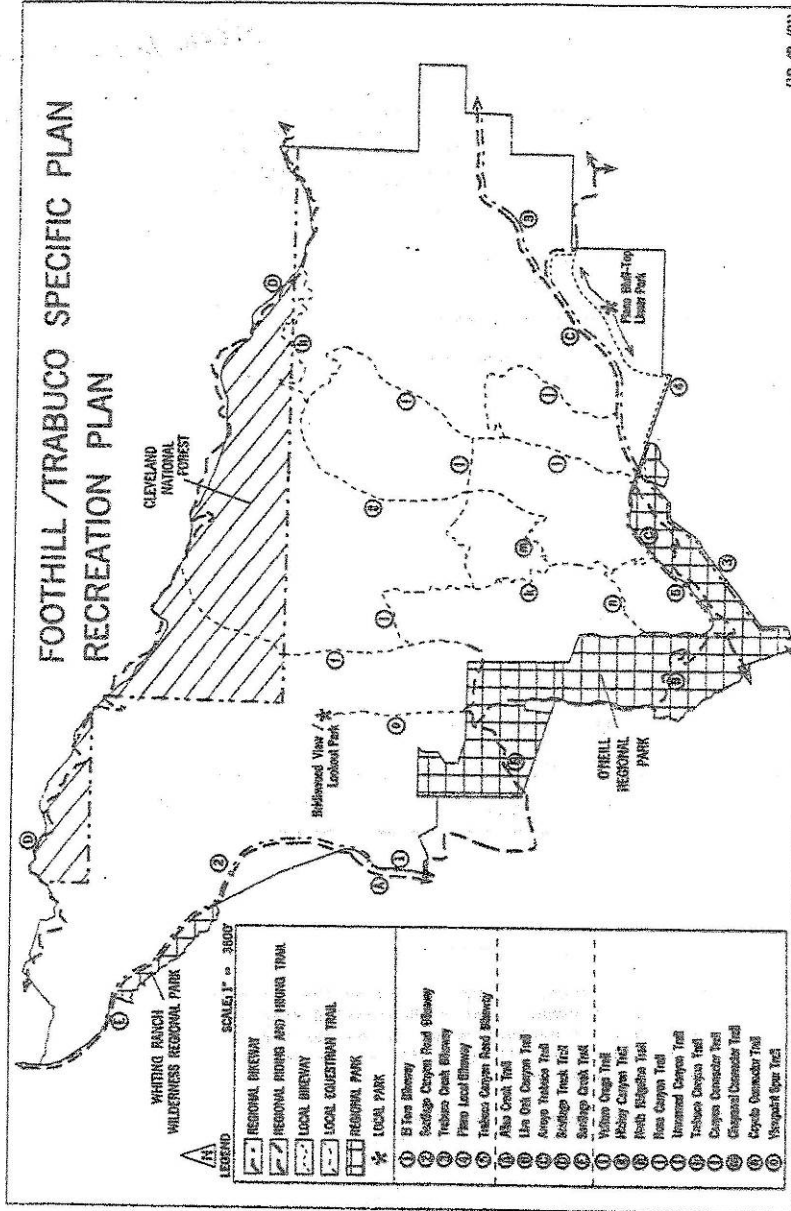


EXHIBIT II-8

47-1
cont.

Section II, Page 36:

4.0 Regional Riding and Hiking Trails

The regional trails listed below are located partially or entirely within the Specific Plan Area and identified on the County Master Plan of Regional Riding and Hiking Trails. As outlined in the goals, policies and objectives of the Master Plan, owners of parcels located adjacent to Master Plan trails shall be required to dedicate easements for trail purposes.

The Master Plan of Regional Trails are shown for reference purposes only on the Specific Plan's Recreation Plan. An amendment to the Master Plan of Regional Riding and Hiking Trails will not require an amendment to the Specific Plan. However, periodic updates of the Specific Plan will incorporate amendments of the Master Plan of Regional Trails into the Recreation Component.

4.1 Description of Individual Regional Riding and Hiking Trails

The letter identified below for each regional trail correspond to those on the Recreation Plan (Exhibit II-8).

Section II, Page 38: Local Riding and Hiking Trails and Implementation

5.0 Local Riding and Hiking Trails

A local riding and hiking trail network was established by the Interim Policy Guidelines for Foothill/Trabuco Area Projects (adopted November 15, 1988) prior to adoption of the Specific Plan. Many of the local riding and hiking trails identified on the Recreation Plan currently exist as unimproved trails on private property, although most have not been offered for dedication and do not meet County standards.

5.1 Implementation of Local Riding and Hiking Trails

Property owners with parcels adjacent to local riding and hiking trails depicted on the Specific Plan's Recreation Plan shall be required to dedicate a 16-foot-wide recreation easement for local riding and hiking trail purposes. Developers shall be required to design, improve and maintain the local trails in conformance with a plan approved by the Manager, EMA-Harbors Beaches and Parks/Program Planning Division.

The following conditions of approval will be applied during the area plan/site development permit/subdivision map approval process to ensure the implementation of local trails:

- a. Prior to the recordation of a final tract/parcel map, the subdivider shall irrevocably offer a 16-foot-wide recreation easement to the County of Orange or its designee for the trails depicted in the Recreation Plan for riding and hiking trail purposes in a manner meeting the approval of the Manager, Harbors, Beaches and Parks/Program Planning Division. The subdivider shall not grant any easement(s) over the property subject to the recreation easement unless such easements are first reviewed and approved by the Manager, Harbor, Beaches and Parks/Program Planning Division. Until such time as the easement is accepted by the County, maintenance and upkeep of the easement area shall be the responsibility of the subdivider or assigns and successors.

47-1
cont.

Section II, Page 38 & 39: Local Riding and Hiking Trails and Implementation (continued)

- b. Prior to the recordation of an applicable final tract/parcel map, the subdivider shall enter into an agreement and provide financial security to insure the installation of improvements, including necessary grading, erosion control, signage, fencing and other specified improvements which shall be installed in accordance with a plan approved by the Manager, Harbors, Beaches and Parks/Program Planning Division.
- c. The affected developer shall design, improve and maintain local riding and hiking trails in conformance with a plan approved by the Manager, Harbors, Beaches and Parks/Program Planning Division.
- d. The affected developer or assigns and successors in interest shall maintain local riding and hiking trails until such time as the County or its designee (i.e. Local Maintenance Entity) accepts the offer of dedication.

Section II, Page 39: Description of Individual Local Riding and Hiking Trails

5.2 Description of Individual Local Riding and Hiking Trails

The descriptions below are general in nature because final alignments cannot be determined until the actual area plan/site plan approval process.

The letters indicated prior to each trail name correspond to those on the Recreation Plan Map (Exhibit II-8).

f. Vulture Crags Trail

The Vulture Crags Trail commences at northern boundary of O'Neill Regional Park near the Goren properties and proceeds north parallel to Live Oak Canyon Road. The trail then gradually arches to the northeast through the National Forest until it links into the Santiago Truck Trail.

g. Hickey Canyon Trail

The trail begins on the northern edge of the Trabuco Oaks Community, between Rose Canyon and Trabuco Canyon, before proceeding northward through Hickey Canyon. After linking into the Canyon Connector Trail, the trail continues north in the canyon arching toward the Cleveland National Forest boundary and meeting Rose Canyon Trail.

h. North Ridgeline Trail

This trail commences at the connection of Rose Canyon and Hickey Canyon Trails just below the boundary of the National Forest. The trail proceeds east through the National Forest until linking into the Santiago Truck Trail.

i. Rose Canyon Trail

Beginning at the riding ring south of Live Oak Canyon Road inside O'Neill Regional Park, the trail proceeds northward along Rose Canyon Road for about one mile and links into the Canyon Connector Trail. Rose Canyon Trail continues north through Rose Canyon and veers west connecting with the Hickey Canyon Trail just south of the National Forest.

j. Unnamed Canyon Trail

The trail commences at the Arroyo Trabuco Regional Trail and proceeds north parallel to and east of Rose Canyon Trail. The trail proceeds north three-quarters of a mile through the Unnamed Canyon before it turns sharply west to link into Rose Canyon Trail.

47-1
cont.

Section II, Page 40: Description of Individual Local Riding and Hiking Trails (continued)

k. Trabuco Canyon Trail

The trail is aligned north/south through Trabuco Canyon, parallel to and east of Live Oak Canyon Road. Commencing near the Trabuco Canyon Fire Station, the trail continues north through the canyon one mile before terminating at the Canyon Connector Trail. The Trabuco Canyon Trail also connects to the Chaparral Connector Trail to provide a link to the Trabuco Oaks Community.

l. Canyon Connector Trail

This trail runs east/west through Rose, Hickey and Trabuco Canyons. The trail commences at Live Oak Canyon Trail north of O'Neill Regional Park and then traverses the canyon in a "zigzag" orientation, for over a mile, before terminating at Rose Canyon Trail. Along its path the trail connects with the Trabuco Canyon, Hickey Canyon and Rose Canyon Trails.

m. Chaparral Connector Trail

This short trail is oriented east/west and connects the southern terminus of Hickey Canyon Trail at the Trabuco Oaks Community with the Trabuco Canyon Trail.

n. Coyote Connector Trail

This short trail runs east/west in a crescent shape to connect Live Oak Canyon Road to the Trabuco Canyon Trail. Its eastern terminus is one-quarter of a mile north of Trabuco Canyon Fire Station No. 18.

o. Viewpoint Spur Trail

The trail commences at O'Neill Regional Park's northern boundary west of Live Oak Canyon Road and continues due north for almost a mile where it terminates at the Bridlewood View/Lookout Local Park. The trail, at its southern terminus, connects to Live Oak Canyon Regional Riding and Hiking Trail.

47-1
cont.

Section III, Page 80: Animal Regulations

1.0 Purpose and intent.

The keeping of horses and other animals is an important aspect of the unique rural character of the Foothill/Trabuco area. The purpose of these regulations is to establish standards for the keeping of horses to ensure clean and sanitary conditions, and the health, safety and welfare of residents of the community and animals. (Informational note: The types, number and manner in which pets and animals are to be kept is further regulated by the Health, Sanitation and Animal Code by the Director of the County Health Care Agency.)

Section A-1

FOOTHILL/TRABUCO SPECIFIC PLAN PROJECT CONSISTENCY CHECKLIST

Introduction

The Foothill/Trabuco Specific Plan Project Consistency Checklist has been developed to assist applicants, EMA staff, interested parties and the Planning Commission in determining whether a project proposal is consistent with the Specific Plan. The Checklist includes only the key Regulations and Guidelines from the Specific Plan; however, all projects shall be required to be found consistent with all of the applicable Regulations and Guidelines included in the Specific Plan. (Refer to the individual Specific Plan Components (Chapter II), the Land Use District Regulations (Chapter III) and the Development and Design Guidelines Chapter IV) for a complete listing.)

The language in the Regulations/Guidelines indicates whether they are mandatory Regulations or non-mandatory Guidelines. "Shall" indicates a mandatory Regulation to which there are no exceptions, while "should" indicates a non-mandatory Guideline. Individual development proposals are not required to be consistent with each and every Guideline. The Planning Commission may approve deviations from the Guidelines; however, the Commission must find that the project is in overall compliance with the Guidelines and consistent with the Goals and Objectives of the Specific Plan.

Implementation

Prior to Planning Commission consideration of any Area Plan, Site Development Permit, Use Permit and/or concurrently processed subdivision map, EMA staff shall complete a Specific Plan Project Consistency Checklist for the project and shall make a determination regarding the project's consistency with the Specific Plan. Additional explanation/discussion of the project's consistency with each Regulation and Guideline shall be attached to the Checklist, as necessary. The Planning Commission shall review the completed Checklist in conjunction with consideration of any discretionary approval and shall utilize the Checklist as the basis for making the necessary findings that the project is in overall compliance with the Specific Plan and consistent with the Goals and Objectives of the Specific Plan.

Section A-15

Recreation Component

The project proposal is consistent with the Recreation Component, and the applicant shall offer to dedicate and improve the Master Plan Hiking and Biking Trails, Master Plan Bikeways, Local Riding and Hiking Trails and Local Parks affecting the property, as required by the Recreation Plan.

47-1
cont.



AGENDA

Environmental Oversight Committee

Marissa Espino, OCTA
 Monte Ward, OCTA Consultant

In preparation for the release of the Resource Management Plans (RMPs), the EOC will discuss the next steps in addressing the public access concerns and questions that were submitted during the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) public comment period. RMPs are being developed for each OCTA preserve and will guide the stewardship and operations of each preserve.

Focus group meetings are being planned in advance of the RMP release in order to review the NCCP/HCP and RMP goals and requirements and discuss and help develop potential options for public access. Future public meetings will also be scheduled so the public can comment on the plans, which will identify how sensitive plants and animals are protected and also what, where, and when public access will be allowed for each preserve.

RMPs for Ferber Ranch, O'Neill Oaks, Saddle Creek South, and Hafen are expected to be available for public review in the summer.

6. Committee Member Follow-Up

Dan Phu, OCTA
 Monte Ward, OCTA Consultant

Questions related to property improvements adjacent to Aliso Canyon.

7. Public Comments

- Delma Johnson - upset & surprised - look at a group of public service personnel to address amt to concern - FTSP needs to be implemented - lifetime to

8. Committee Member Reports

9. Next Meeting – May 6, 2015

- you are here to protect the interest of the community

10. Adjournment

Rich Gomez - look forward to the workshops - seems reasonable to extend frequency of planned hikes & rides

*- EOC is not advocating to ride different trails, just existing fire roads
 - specify to FTSP & how it aligns*

47-1
 cont.

Public Comments: The Agenda descriptions are intended to give notice to members of the public of a general summary of items of business to be transacted or discussed. Members from the public wishing to address the Committee will be recognized by the Chairman at the time the Agenda item is to be considered. A speaker's comments shall be limited to three (3) minutes. Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the OCTA at (714) 560-5725, no less than two (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.



AGENDA

Environmental Oversight Committee

Committee Members

- Lori Donchak, Chairman
- Melanie Schlotterbeck, Vice Chairman
- Charles Baker, Caltrans District 12
- Lisa Bartlett, OCTA Board of Directors
- Veronica Li, US Army Corps of Engineers
- Dr. David Chapel, Brandman University
- Philip La Puma, PE, OCTA TOC
- David Mayer, CA Dept. of Fish & Wildlife
- Derek McGregor, DMc Engineering
- Dan Silver, Endangered Habitats League
- Jonathan Snyder, US Fish & Wildlife Service
- John Walsh, CA Wildlife Conservation Board

Orange County Transportation Authority
 600 South Main Street, Room 154
 Orange, California
April 1, 2015 at 2:30 p.m.

*- Brown Act violation?
 - whole EOC instead*

- TOC - action minutes

- David won't be back from vacation until April 13

- add neighborhood representative to outline

47-1
cont.

REVISED

1. Welcome
2. Pledge of Allegiance
3. Approval of March 4, 2015 Minutes
4. New Irvine Ranch Conservancy Restoration Projects Update

approved, no changes

Dan Phu, OCTA
 Recommendations

1. Endorse staff's recommendation to adjust the New Irvine Ranch Conservancy's restoration projects as outlined herein.
2. Direct staff to reflect revisions as appropriate in the final Natural Community Conservation Plan/Habitat Conservation Plan and associated Environmental Impact Report/Statement.

Measure M2 includes an Environmental Mitigation Program (EMP) to deliver comprehensive mitigation for the environmental impacts of freeway projects in exchange for streamlined project approvals from the state and federal resource and regulatory agencies. To date, the EMP has acquired a number of conservation properties and provided funding for habitat restoration projects. A status report, including an overview of the restoration projects selected for M2 funding as well as specific project revisions, is presented.

5. Public Access Focus Group Meetings Update

Public Comments: The Agenda descriptions are intended to give notice to members of the public of a general summary of items of business to be transacted or discussed. Members from the public wishing to address the Committee will be recognized by the Chairman at the time the Agenda item is to be considered. A speaker's comments shall be limited to three (3) minutes. Any person with a disability who requires a modification or accommodation in order to participate in this meeting should contact the OCTA at (714) 560-5725, no less than two (2) business days prior to this meeting to enable OCTA to make reasonable arrangements to assure accessibility to this meeting.

Minutes

Measure M2 Environmental Oversight Committee

*Orange County Transportation Authority
600 South Main Street, Room 154
Orange, California
March 4, 2015 at 2:30 p.m.*

Committee Members Present:

Chair Lori Donchak, OCTA Board of Directors
Vice-Chair Melanie Schlotterbeck, Measure M Support Groups
Lisa Bartlett, OCTA Board of Directors
Charles Baker for Sylvia Vega, Caltrans
Dr. David Chapel, Brandman University
Veronica Li, US Army Corps of Engineers
David Mayer, CA Department of Fish and Wildlife
Derek McGregor, Public Member
Philip La Puma, Measure M2 Taxpayers Oversight Committee
Dan Silver, Endangered Habitats League
Jonathan Snyder, US Fish and Wildlife Service

47-1
cont.

Committee Member(s) Absent:

John Walsh, California Wildlife Conservation Board

Orange County Transportation Authority Staff Present:

Marissa Espino, Senior Strategic Communications Specialist
Lesley Hill, Planning Department Project Manager
Janice Kadlec, Public Reporter
Dan Phu, Project Development Section Manager
Monte Ward, Measure M Consultant

Guests

Scott Ferguson
Rich Gomez
Tom Hetzel
Delma Johnson
Phil McWilliams
Sharon Stancato
Dana Judd

1. Welcome

Chair Lori Donchak called the Environmental Oversight Committee (EOC) meeting to order at 2:30 p.m.

2. Pledge of Allegiance

Vice-Chair Melanie Schlotterbeck led the Pledge of Allegiance.

3. Approval of February 4, 2015 minutes

Chair Lori Donchak asked if there were any additions or corrections to the February 4, 2015 EOC meeting minutes. Vice-Chair Melanie Schlotterbeck asked for one correction on page four, first sentence in Gloria Sefton's public comments. "Ms. Sefton spoke in favor of Alternative 2 not Alternative-4."

A motion was made by Melanie Schlotterbeck, seconded by Jonathan Snyder, and passed unanimously to approve the February 4, 2015 EOC meeting minutes as corrected.

4. Environmental Mitigation Long-Term Funding Strategy Recommendations

Dan Phu and Monte Ward presented the recommendations and answered questions about some of the language used in the recommendation.

Dan Silver and Monte Ward discussed funding priorities and how they were developed.

After discussion, Monte Ward suggested adding the following amendment to Recommendation A.:

- A. *Endorse the Guiding Principles to meet Measure M2 obligations; maintain an inclusive process; and allocate remaining revenues to off-set environmental impacts from future state highway improvement projects, **consistent in nature with the M2 plan.***

Derek McGregor asked additional questions regarding project funding and regulatory requirements.

Derek McGregor suggested making the following change to Attachment C Environmental Mitigation Program Guiding Principles: *Maintain an Inclusive Process: All deliberations and decisions shall be accompanied by robust public outreach and participation.*

A motion was made by Melanie Schlotterbeck, seconded by David Mayer, and carried unanimously to:

- A. Endorse the Guiding Principles to meet Measure M2 obligations; maintain an inclusive process; and allocate remaining revenues to off-set environmental impacts from future state highway improvement projects consistent in nature with the M2 plan.
- B. Endorse the Long Term Funding Strategy to establish overall priorities and a timetable for future spending recommendations.

47-1
cont.

- B. Endorse the expenditure options list derived from the Environmental Oversight Committee analysis.
- C. Direct Staff and the EOC to identify candidate projects and programs in accordance with the Long-Term Funding Strategy.

And also make the following change to the Environmental Mitigation Program Guiding Principles, Maintain an Inclusive Process, forth bullet point: *All deliberations and decisions shall be accompanied by robust public outreach and participation.*

5. Conservation Plan and Comments and Resource Management Plans Update

Dan Phu and Monte Ward presented the recommendations and answered questions. Public release of the draft Conservation Plan and environmental document concluded on February 6th. All comments received will be included in the final Conservation Plan with a response to those comments.

Marissa Espino and Lesley Hill reported on the release of the Resource Management Plans (RMP) for public review this spring 2015. The RMPs will address preserve specific management needs (including public access). Given the amount of specific comments pertaining to public access during the Draft Natural Community Conservation Plan/Habitat Conservation Plan public comment period, the EOC agreed that OCTA staff should postpone the release of the RMPs until summer and host workshops with key stakeholders to discuss public access options and opportunities in order to further develop the RMPs prior to the public release.

6. Environmental Oversight Committee Matters

At the February EOC meeting it was noted the OCTA Executive Committee requested that all OCTA Board Committee meeting minutes be modified to an action item format. There was no objection to going to an action item format for the EOC meetings.

7. Public Comments

Scott Ferguson: Southern California Director for the Conservation Fund, National Land Conservation Organization. His Organization is supportive of OCTA's efforts and looks forward to working with the Environmental Oversight Committee on future calls.

Rich Gomez: Active equestrian member of Equestrian Trails, Inc. (ETI) 357 Corral and part of the environmental coalition that supported renewed Measure M. He gave feedback on the proposal to include access comments to the Resource Management Plan (RMP) and environmental documents. ETI is dedicated to the acquisition and preservation trails and open space land. They are conservation oriented stewards of open space lands and the preservation of trails.

47-1
cont.

47-1
cont.

Their commitment can be seen in environmental clean-up activities and OC Parks. They continue to help OC Parks to establish their public goals and objectives and they would like to maintain a similar role in the OCTA land preserves. Mr. Gomez said the ETI 357 Coral are advocates for trail access but understand the preserve limitations and OCTA's concerns for the preserves and the wildlife agencies.

Mr. Gomez gave an example of equestrians co-existing on trails in preserves. He also submitted an example of trail alignments and easements. He asked that OCTA and the EOC read the examples he provided and add controlled trail access to the RMP draft and ultimately the recreation plan for Ferber Ranch.

Tom Hetzel: Said level two of the OCTA plan speaks very clearly in the restoration section called Compatible Restoration Opportunities for the Public. We are now at level two of your plan and have been since 2011 and there has been no compatible recreation opportunities for the public.

Mr. Hetzel produced a letter from the Orange County Parks stating any use of County lands for fishing, equestrian use, etc. is subject to the County's police power, which is instrumental in protecting the property and the people itself. He did not think the Department of Fish and Wildlife would buy this. They are custodians of all the riverbeds. Article 1, Section 25 of California State Constitution gives everyone the right to fish in the right-of-way. If the right-of-way is dried up they have the right to use the streambeds and the banks to scout the area and he has been given permission by a warden of the California Department of Fish and Wildlife to do so. Orange County Parks has barbed wired all the land and are giving tickets to anyone going onto the land.

If OCTA is truly restoring lower Silverado they have to take a look at getting water to the streambeds. It is getting all sucked out and going underground.

He also did not see anything in the plans where funds were allocated for recreational activities.

Delma Johnson: Said the OCTA plan impacts the Trabuco community trail access. The four parcels block historical local connective riding and hiking trails. These regional and local trails are shared-use in design, meaning they are used by walkers, jogger, mountain bicyclists and equestrians besides as exit route during fires, floods, and emergency evacuations. The trails are also used for heavy firefighting equipment access into more remote areas.

The locking of the Ferber property gate eliminates secondary emergency exits. Thirteen families must use Rose Canyon Road to exit the canyon. These families have no secondary exit. All of the Trabuco Village and Trabuco Oaks Ranches also lack secondary exits.

47-1
cont.

Ms. Johnson provided copies of her comments and asked that they are considered in the Resource Management Plan.

Phil McWilliams: Director of the Board of the Silverado Modjeska Recreation and Park District. They were part of the environmental coalition that supported Measure M2. He has spent the last few months watching the process regarding the future expenditures of the Environmental Mitigation Program and has been pleased with the thorough and thoughtful job of the Ad-Hoc subcommittee. Especially with the heat map handout, the Environmental Coalition believes the most appropriate expenditures are consistent with the existing options, which are acquisition, restoration, and management. The new concept of mitigation banking fits right in.

Sharon Stancato: Resident/owner in Trabuco Canyon for 20 years. She talked about the impact that the closing off the trails has made to the community and the danger of fires if the firemen can't get to the fires. The residents of the area need to at least have the Ferber Ranch area open to provide access to the area.

Dana Judd: Thanked OCTA for extending the time on the RMP and for the good job they are doing on providing information workshops.

8. Next Meeting – April 1, 2015

The next EOC meeting will be April 1, 2015 at 2:30 p.m.

9. Closed Session

The EOC adjourned to Closed Session at 3:40 p.m. and ended about 4 p.m. with no public report.

Pursuant to Government Code Section 54956.8 the EOC adjourned to discuss the price and terms of payment for the acquisition of the following real properties.

The negotiator for OCTA is Dan Phu. The negotiators for the real properties are as specified.

<u>Real Property</u>	<u>Geographic Area</u>	<u>Assessor's Parcel Number</u>	<u>Owner's Negotiator</u>	<u>Acreage</u>
Aliso Canyon	Coastal	056-240-66	John Mansour	150
Ferber Ranch	Trabuco	842-011-04, 842-041-04, 842-051-04	Tim Jones	399
Irvine Mesa Corridor	Cleveland Nat'l	105-060-02, 105-060-09, 105-060-19, 105-051-36, 876-011-02, 876-011-03, 876-011-19, 876-011-07, 876-011-08, 876-011-11, 876-011-18, 105-051-18, 876-021-15, 876-021-04, 876-021-05, 105-051-33, 105-051-21, 105-051-57, 105-201-12, 105-201-11	David Meyers	670

Environmental Oversight Committee
Meeting Minutes, March 4, 2015

Page 6

47-1
cont.

St. Michael's Abbey	Cleveland Nat'l Forest	876-034-01, 876-041-01, 105-051-83, 105-051-84, 105-051-85, 105-070-93	Michael Recupero	327.9
Mitchell Properties West	Trabuco	842-081-12	Steven U. Parker	101.7
Saddleback Meadows	Trabuco	856-071-01/09, 856-072-01/51, 856-073-01/58, 856-074-01/45, 856-075-01/57, 856-081-01/11, 856-082-01/44, 856-083-01/46, 856-084-01/37, 856-085-01/41, 856-086-01/37, 856-091-02/11, 856-092-01/42, 856-093-01/25, 856-094-01/34, 856-095-01/62, 856-096-01/57, 856-097-01/34, 856-098-01/37	William Fleissig	222
Sky Ranch	Trabuco	842-021-4, 05, 07, 08 and 842-031-04, 05, 08, 09	TBD	526.9
Takahashi (Baker Square LLC)	Cleveland Nat'l Forest	105-051-12	Carl Reinhart	643
Watson	Trabuco	858-021-10, 11	TBD	98.3



April 1, 2015

To: Environmental Oversight Committee
From: Orange County Transportation Authority Staff
Subject: Measure M2 Environmental Mitigation Program Restoration Projects Status Update

Overview

Measure M2 includes an Environmental Mitigation Program (EMP) to deliver comprehensive mitigation for the environmental impacts of freeway projects in exchange for streamlined project approvals from the state and federal resource and regulatory agencies. To date, the EMP has acquired a number of conservation properties and provided funding for habitat restoration projects. A status report, including an overview of the restoration projects selected for M2 funding as well as specific project revisions, is presented.

Recommendations

- A. Endorse staff's recommendation to adjust the New Irvine Ranch Conservancy's restoration projects as outlined herein.
- B. Direct staff to reflect revisions as appropriate in the final Natural Community Conservation Plan/Habitat Conservation Plan and associated Environmental Impact Report/Statement.

Background

Measure M2 (M2) includes an innovative environmental mitigation program (EMP). Under this program, biological impacts from the M2 freeway program of projects are addressed through a consolidated Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) rather than a piecemeal project-by-project effort. In exchange, state and federal resources agencies (consisting of the California Department of Fish and Wildlife [CDFW] and the United States Fish and Wildlife Service [USFWS]) agreed to fast-track the permitting process and entered into a master agreement for the M2 freeway projects. On a parallel process, the Army Corps of Engineers (ACOE) and the State Water Resources Control Board (SWRCB) are also working with staff to streamline the regulatory permitting process. The goal of the program is to deliver more effective mitigation while supporting faster delivery of M2 freeway improvements.

Orange County Transportation Authority
 550 South Main Street / P.O. Box 14184 / Orange / California 92863-1584 / (714) 560-OCTA (6282)

47-1
 cont.

Measure M2 Environmental Mitigation Program Restoration Projects Status Update

As part of the Early Action Plan, approximately \$80 million was estimated to be available for the Mitigation Program. Due to the declining economy, available funding was adjusted to approximately \$55 million. This allocation was to be used for property acquisitions, habitat restoration, land management, and support of the program. Support of the program included the preparation of the NCCP/HCP and technical consultant support.

With a current Board allocation goal of 80 percent of funds for acquisition and 20 percent for restoration over the life of the EMP, approximately \$42 million and \$10.5 million were available for acquisitions and restoration, respectively. The first round of funding yielded approximately \$5.5 million towards restoration projects. In September 2010, the Board approved six restoration projects for funding (Round 1). Orange County Transportation Authority (OCTA) staff coordinated and executed contracts with five restoration project sponsors, in a total amount of \$5,362,500. One of the projects, Anaheim's Pelanconi Park Restoration Project, dropped out during the restoration development process.

The second round of funding yielded approximately \$5 million towards Round 2 restoration projects and also included the remaining amount from the first round of funding (\$137,500). Approximately \$5,137,500 was available for the Round 2 restoration projects. In May 2012, the Board approved six restoration projects for funding. These six restoration projects totaled \$4,716,080. Table 1 below outlines all eleven restoration projects. A graphic depicting the restoration project locations is included as Attachment A. The next round of restoration project(s) funding is anticipated to occur in fiscal year 2015/16.

47-1
cont.

Table 1. OCTA Funded Restoration Projects

Restoration Project	Sponsor	Proposed Cost	Approx. Acreage*	Geographic Area	General Habitat Types
City Parcel	City of San Juan Capistrano	\$1,500,000	53	San Juan Capistrano	Riparian corridor, coastal sage scrub (CSS), oak woodland, and native grassland
Fairview Park	City of Costa Mesa	\$2,000,000	23	Costa Mesa	wetlands, native grassland, CSS, willow scrub, oak woodland
Irvine Ranch (Agua Chino and Bee Flat Canyon)	Irvine Ranch Conservancy	\$1,450,000	94.9	Irvine	chaparral, CSS, coast live oak/sycamore oak woodland, native grassland, and riparian

Measure M2 Environmental Mitigation Program Restoration Projects Status Update **Page 3**

47-1
cont.

Table 1. OCTA Funded Restoration Projects

Restoration Project	Sponsor	Proposed Cost	Approx. Acreage*	Geographic Area	General Habitat Types
UCI Ecological Reserve	Nature Reserve of OC	\$325,000	8.5	Irvine	cactus scrub
Big Bend	Laguna Canyon Foundation	\$87,500	3.7	Laguna Beach	CSS, riparian woodland
Aliso Creek	Laguna Canyon Foundation	\$1,105,000	55	Laguna Niguel	riparian
Chino Hills State Park	Chino Hills State Park	\$193,000	21	Yorba Linda	willow riparian, oak-walnut woodland, cactus scrub
Harriett Weider Regional Park	Bolsa Chica Conservancy	\$475,000	8.2	Huntington Beach	native grassland, CSS, riparian
Lower Silverado Canyon	Irvine Ranch Conservancy	\$1,399,580	44	County of Orange	riparian
North Coal Canyon	California Department of Parks and Recreation	\$247,500	5.5	Yorba Linda	Riversidian Alluvial fan CSS
West Loma	Irvine Ranch Conservancy	\$1,296,000	80	County of Orange	scrub, riparian

Note: shaded projects were funded as part of Round 1 and the unshaded projects were part of Round 2.
 *Proposed acreage is subject to change and may be adjusted slightly once the restoration work is completed.

The restoration projects focused on impacts which can be tied back to the 13 M2 freeway projects. Benefits to specific watersheds were also considered to address the mitigation needs of the SWRCB and the ACOE in relation to Sections 401 and 404 of the Clean Water Act. The ACOE and the SWRCB will issue permits, pursuant to the state and federal Clean Water Acts for the construction of the M2 freeway projects. This has created an additional layer to address and was a large focus of the decision-making process for Round 2 of the restoration projects. This regulatory permitting process is a separate but parallel process to the NCCP/HCP. The approach is to keep these two processes on similar timelines. The funded restoration projects are integrated into the NCCP/HCP to fulfill mitigation requirements.

**Measure M2 Environmental Mitigation Program Restoration
Projects Status Update****Page 4*****Discussion***

The M2-funded restoration projects are being implemented by project sponsors (various cities and non-profit entities) within Orange County. These project sponsors essentially act as contractors performing work on behalf of OCTA. Many of these projects have received resources and regulatory agency approvals and are well underway. Some of these project sponsors are still navigating through the necessary compliance process and developing restoration plans. OCTA staff and OCTA consultants are assisting project sponsors through this process.

OCTA staff was recently contacted by the New Irvine Ranch Conservancy (NIRC) (formerly known as the Irvine Ranch Conservancy) pursuant to three (3) funded restoration project areas. NIRC staff requested that OCTA consider potential cost savings solutions in these specific projects in order to offset unexpected costs related to project delays. Project delays have resulted from a higher level of effort (not originally anticipated) necessary to meet ACOE restoration plan (Habitat Mitigation and Monitoring Plan) criteria pursuant to the 2008 Final Compensatory Mitigation Rule, as issued by the United States Environmental Protection Agency and the ACOE. The initiation of field work in the Agua Chinon, Lower Silverado, and West Loma restoration projects has been delayed significantly by this process, and costs due to delays have accumulated over time. It has also increased field costs of restoration. This situation has resulted in the inability of remaining contract budgets to fulfill project objectives. These NIRC restoration projects involve riparian and upland habitat components. The riparian component is particularly important to the M2 EMP regulatory permitting program.

Staff met with NIRC, CDFW, and USFWS in order to discuss the potential solutions for off-setting cost increases. In general, the solutions proposed include acreage adjustments to upland (as well as a small amount of riparian which would not affect waters of the U.S.) habitat types and a less intense level of effort (where possible). The off-setting efforts were proposed strategically to minimize impacts to the integrity of the NIRC restoration projects as well as the NCCP/HCP commitments at large. The NIRC projects are designed to achieve landscape level mitigation while minimizing effort and cost and still meeting success criteria. Acres identified for removal are generally marginal and do not undermine project or subwatershed conservation integrity and goals. Specific areas containing upland habitat within each watershed were targeted to minimize effects to the overall restoration effort. The combined acquisition and restoration projects will provide sufficient upland habitat. Table 2 shows NIRC's proposed adjustment to the habitat restoration acreage.

47-1
cont.

Measure M2 Environmental Mitigation Program Restoration Projects Status Update **Page 5**

Restoration Project	Habitat Type	Original Acreage	Proposed Acreage Reduction*	Proposed Acreage
Agua Chinon/Bee Flat	Elderberry Scrub/riparian**	94.9	8.93	85.97
Lower Silverado	upland scrub and riparian**	44	11.90	32.10
West Loma	upland scrub	80	14.03	65.97

*Proposed acreage reduction is subject to change and may be adjusted slightly once the restoration work is completed.

** Riparian acreage reduction will not affect restoration within waters of the U.S.

Based on the proposed modification by NIRC, the total acreage for the three projects would be adjusted by 34.86 acres (1.44 of that acreage is riparian with the remaining amount comprised of upland habitat). This will result in an average cost per acre increase from approximately \$25,400/acre to approximately \$27,800/acre. It is important to note that the revised cost for the NIRC restoration projects is still considered reasonable when compared to the cost of other funded restoration projects with the same habitat types on a per acre basis.

Staff has reviewed these modifications with the wildlife agencies. The first priority was to ensure that these modifications would not affect the overall NCCP/HCP habitat acreage commitments. As stated in the NCCP/HCP, the OCTA inventory of "scrub" habitat is well above the conservation target. The reductions include a small amount (less than 3 acres) of riparian habitat. It is important to note that this reduction will not affect proposed work within the waters of the U.S. (jurisdictional by the ACOE). Staff and the wildlife agencies agree that these habitat types could be modified accordingly to provide the necessary savings to the NIRC restoration projects, without affecting the integrity of the NCCP/HCP commitments. The final NCCP/HCP and associated Environmental Impact Report/Statement (EIR/EIS) acreage numbers will need to be adjusted accordingly to capture this modification.

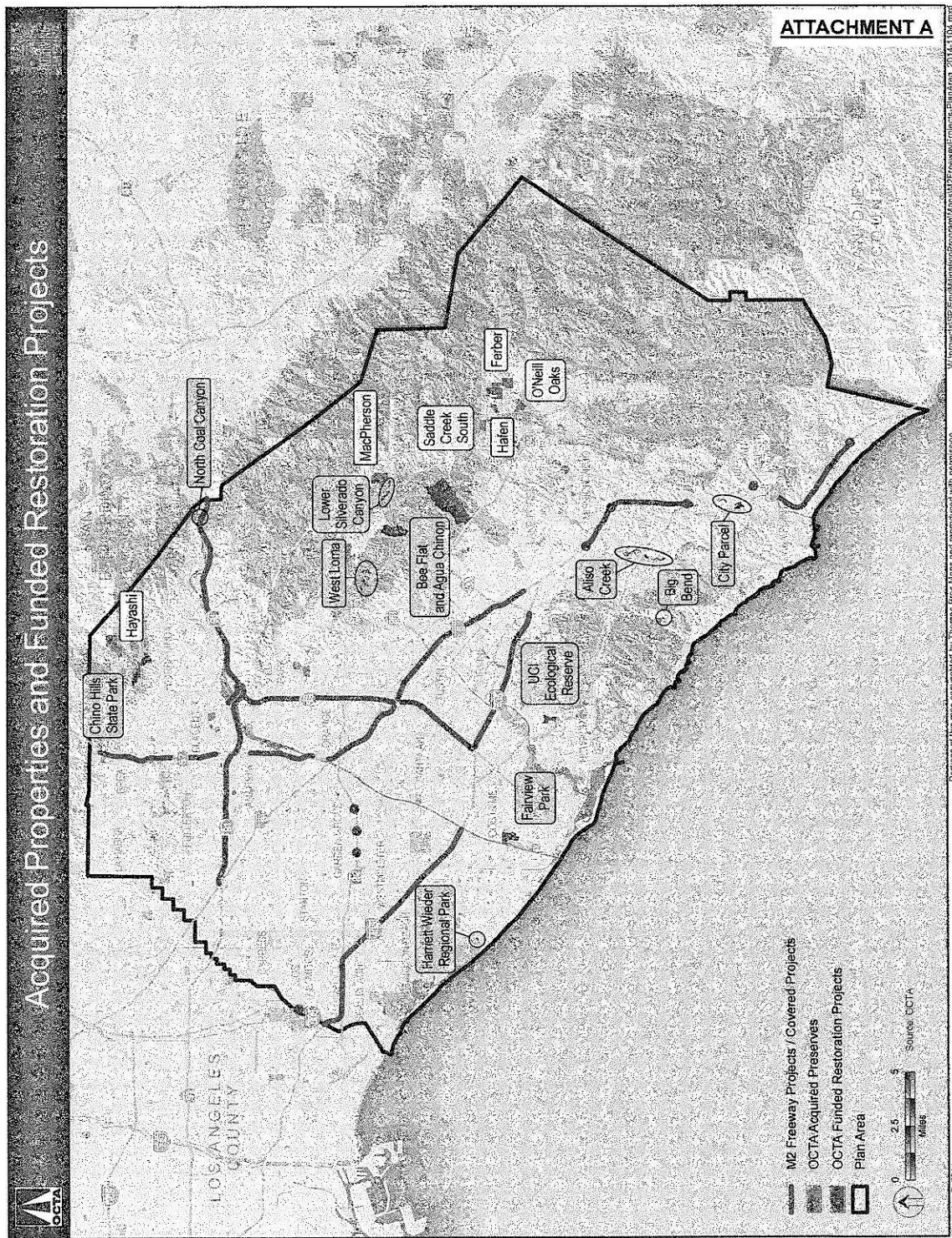
Next Steps

If the Environmental Oversight Committee endorses the revisions to the three NIRC restoration projects, staff will update the NCCP/HCP and EIR/EIS and will provide this information to the OCTA Board as part of the Measure M2 EMP update.

Attachments

- A. Acquired Properties and Funded Restoration Projects

47-1
cont.



Response to Comment Letter 47: Delma Johnson – 4/1/15

Comment 47-1 Response

Comment: The commenter has attached portions of the FTSP and meeting minutes from a March 4, 2015 EOC meeting. The commenter has also submitted a Measure M2 Environmental Mitigation Program Restoration Projects Status Update from the EOC to OCTA on April 1, 2015. The commenter also offered a number of suggestions for access and management of the trails depicted on the FTSP within the boundaries of the OCTA's Preserves.

Response: Please see response to comment 45-1 above. The trails referred to by the commenter are not public access easements. Section 5.0 of the FTSP itself notes that "Many of the local riding and hiking trails identified on the Recreation Plan currently exist as unimproved trails on private property, although most have not been offered for dedication and do not meet County standards." The identification of local riding and hiking trails in the FTSP does not establish a legal right to pass over these trails. In many cases, the existing trails pass over private land without formal permission to do so. OCTA will coordinate with the County to the extent that regional trail planning efforts do not conflict with OCTA's primary objective of maintaining and protecting its Preserves for their habitat value. The acquisition of the Preserves did not physically divide the community of Trabuco Canyon because did not create any new physical barrier in the community. The acquisition and the management plan have no impact on transportation because they affect no roads. Pedestrian, riding, and hiking access are recreational uses, not transportation. The acquisition and the management plan have reduced recreational opportunities; however, these were not legally sanctioned activities.

It is OCTA's understanding that access to some trails was granted to certain individuals who either knew previous property owners/lessees or the owners were not aware their property was being accessed. The Trabuco Canyon Preserves acquired by OCTA were previously held under private ownership and there was no formal granting of public access on any of these properties.

In addition, the majority of the Preserves that OCTA owns are largely surrounded by private properties with limited or no public access. OCTA must keep this in mind when permitting any sort of access on its Preserves as to not inadvertently encourage trespassing onto adjacent private properties. OCTA will continue to work with neighbors to determine whether there may be a possible accommodation of their interests.

As has been explained in responses to other comments, the intent of the FTSP was to enable the County of Orange (County) to exact trail designations and other public uses through the conditions of an approval process if a property owner triggered the entitlement process. Since OCTA acquired the Preserves for conservation purposes, there was no triggering of the entitlement process which would require the County to approve the NCCP/HCP or related EIR/EIS. OCTA recognizes the importance of public access to the Preserves on the part of local residents and has been collaborating with the Wildlife Agencies and stakeholders alike to identify ways to permit access while protecting the biological integrity of the Preserves. However, the primary purpose of the Preserves is as protected habitat for listed species and OCTA cannot allow uses that would conflict with that purpose. OCTA will continue to work to provide limited, controlled access to its Preserves where that access will not adversely affect habitat or sensitive species residing there. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Comment Letter 48: Delma Johnson – 7/17/15

To: Dan Phu, Section Manager OCTA Project Plan, Orange County Transportation Authority
 Marisa Espino, Strategic Communication Office, mespino@octa.net
 550 S. Main St. P.O. Box 14184, Orange, CA. 92863

Attn: M2, NCCP/HCP, Draft EIR.

Attn: COMMENTS TO DRAFT RMP'S – FERBER RANCH PARCEL

Attn: COMMENTS TO DRAFT RMP'S – O'NEILL OAKS PARCEL

Attn: COMMENTS TO DRAFT RMP'S – HAFEN PARCEL

July 17, 2015

COMMENTS TO Draft RMP FERBER PARCEL/EIR OCTA FERBER PARCEL

Trail access to Ferber Ranch and O'Neill Oaks are currently closed and have been closed for two years. The impact is:

- Pedestrians, Equestrians, Hikers, Mountain bikers, and Joggers no longer have access to these trails.
- The equestrian community must now compete with traffic on Trabuco Oaks Drive. Equestrians (and young equestrians) need safe access to O'Neill Park, Arroyo Regional Trail and Cleveland National Forest.
- These trails serve as a secondary exit route for emergency evacuations. Fire, flood or landslides are frequent hazards to the Trabuco Canyon community.

❖ **Environmental factors that are being affected by this project.** Impacts Trabuco Community:

1. **Land Use Planning-** When the OCTA Project Plan closed the peripheral trails on the Ferber Parcel and O'Neill Oaks Parcel; they physically divided the long-standing established community of Trabuco Canyon.
2. **Transportation.** Closed Pedestrian, riding, hiking, Equestrian access.
3. **Recreation.** Closed trail access to nearby neighboring uses, such as Cleveland National Forest, O'Neill Regional Park, events at neighboring equestrian facilities for the equestrian community, ability of Trabuco Community to visit neighbors on horseback, to attend community functions.

On the basis of evaluation, the OCTA Project Plan, NCCP/HCP , Resource Management Plan, Ferber Parcel and O'Neill Oaks Parcel, has failed to mitigate the high impact of incapacitating the Trabuco Canyon Community from accessing our own neighborhood and neighboring uses.

❖ **The strategic intent of the Foothill/Trabuco Specific Plan (FTSP) Communities Trail Masterplan was to:**

- Maintain and enhance existing trail network throughout the foothill canyon areas.
- Fill in the missing trail links to facilitate critical circulation.
- Effective creation of a community pedestrian system in lieu of sidewalks.

48-1

48-1
cont.

- Integrate with existing and proposed county trails system.
- Establish defined trail corridors for future scenic, recreational and ecological purposes.
- Influence community development patterns by encouraging pedestrian, equestrian and bicycle linkage with an extensive trail network.
- Help define trail standards: construction, maintenance and safety.
- Double as fire prevention and provide access routes for firefighting equipment to more remote areas.
- Build consensus between plan initiators, trail users, local residents, and county authorities.
- Enhance community value.

OCTA Project Plan within the FTSP Area must be found consistent with the Specific Plan Recreational Component and neighboring land usages.

FTSP Recreation Component was approved by Resolution Number 91-34 by the Orange County Planning Commission on October 24, 1991 and adopted by Ordinance Number 3851 by the County Board of Supervisors on December 10, 1991.

Implementation of the Local Riding and Hiking Trails will be effective in reducing the undesirable impacts of the OCTA Ferber Parcel Trail Closures and O'Neill Oaks Parcel Trail Closures, as defined within the strategic intent of the FTSP Communities Trail Master Plan.

❖ **10 Local Trails defined as multi-usage in the FTSP 1991**

(F) Vulture Crags Trail- Has been designated as Regional Trail.

(G) Hickey Canyon Trail – High priority trail. It connects all of Trabuco Village and Trabuco Ranches to Hamilton Oaks and on to North Ridgeline Trail and on to Santiago Truck Trail Cleveland National Forest. Most Crucial for our circulation.

(H) North Ridgeline Trail – Has been designated on a Regional level.

(I) Rose Canyon Trail- Currently easements depicted along private road from Trabuco Canyon Road at O'Neill Regional Park to Joplin County of Orange to connect with North Ridgeline Trail on to Cleveland National Forest.

(J) Unnamed Canyon Trail- Connects Rose Canyon Trail (Rose Canyon Ranches) south to Arroyo Trabuco Trail at O'Neill Regional Park.

(K) Trabuco Canyon Trail – The trail is aligned north/south through Trabuco Canyon, parallel to and east of Live Oak Canyon Road. Commencing near the Trabuco Canyon Fire Station, the trail continues north through the canyon one mile before terminating at the Canyon Connector Trail. The Trabuco Canyon Trail also connects to the Chaparral Connector Trail to provide a link to the Trabuco Oaks Community.

48-1
cont.

- (L) **Canyon Connector Trail – Most important trail.** Connects **Rose Canyon road** west to **Trabuco Oaks Dr.** (includes **Trabuco Village, Trabuco Ranches**) on west, to connect with regional trail **Trabuco Canyon Trail** which connects North (**Cleveland Forest**) and South to **O’Neill park**. Also connects to **Hickey Canyon Trail** giving the **ability for connectivity throughout the internal Heart of Trabuco Canyon**. Connects **Hamilton Oaks community** to **Trabuco Ranches, Trabuco Village, Rose Canyon Ranches, Joplins, Boys Town**. Connects **Hunky Dory** by way of **HAFEN Parcel** south to **Trabuco Cyn Trail** and east to meet at **Canyon Connector trail**. **This is a high priority trail access, mitigating the impact of physically dividing the community** .Most crucial for our Circulation.
- (M) **Chaparral Connector Trail** - Connects **Trabuco Village and Trabuco Ranches** west to **Atkinson Lane** and Connects to **Trabuco Canyon Trail** which goes on North to **Cleveland National Forest** or South to **Arroyo Trabuco Trail** in **O’Neill Regional Park**
- (N) **Coyote Connector**- This short trail runs east/west in a crescent shape to connect **Live Oak Canyon Road** to the **Trabuco Canyon Trail**. Its eastern terminus is one-quarter of a mile north of **Trabuco Canyon Fire Station No. 18**.
- (O) **Viewpoint Spur Trail** – Probably go regional. Connects (Regional Trail **Arroyo Trabuco**) Trail to **Bridlewood View/ Lookout Park**.

We look forward to working with you to strike a balance between preservation of the properties and biological resources while enabling public access which meets the community’s needs.

❖ **Trails depicted by FTSP within the boundaries of OCTA - Project Ferber Parcel**

G. HICKEY CANYON TRAIL- **Critical Circulation Priority Trail Access, for the Survival of the Community** shall have **daily access from sunrise to sunset**. This is a **Ferber Parcel** Peripheral Trail on western boundary of property. Can be closed during rain and for two days after rain or according to emergency closure. Shall be open during threats of fire or if street closures occur, giving community north and south exit options during emergency. **This trail we cannot live without.** (See attached trail Map).

L. CANYON CONNECTOR TRAIL- **Highest Critical Circulation Priority Trail Access, for Survival of the Community**. Shall have **daily access from sunrise to sunset**. This is a **Ferber Parcel** Peripheral Trail on Southern boundary of Property. Can be closed during rain and for two days after rain or according to emergency closure. Shall be open during threats of fire or if street closures occur, giving community east and west exit options during emergencies. **This trail we cannot live without.** (See attached trail map).

48-1
cont.

- I. **ROSE CANYON ROAD TRAIL**- Trail adjacent to Rose Canyon Road, always open to residence during any emergency.
- J. **UNNAMED CANYON TRAIL**- Should be studied as possible future staging area for Ferber Ranch and any possible realignment to protect the core of the parcel.

❖ **Trails depicted by FTSP within the boundaries of OCTA - Project O'NEILL OAKS PARCEL.**

- K. **Trabuco Canyon Trail**. – **Critical Circulation Priority** for Community. Shall have daily access from **Sunrise to sunset**. Can be closed during rain and for two days after rain or according to emergency closure. Gives access to O'Neill Regional Park and Regional Trail Arroyo Trabuco. See attached trail map.
- N. **Coyote Connector Trail**- Can be managed by Preserves RMP.

❖ **Trails depicted by FTSP within the boundaries of OCTA - Project HAFEN PARCEL.**

- L. **Canyon Connector Trail** - Peripheral trail that connects regional Vulture Crag Trail to Trabuco Canyon Trail. Regional Implications. Shall have access from Sunrise to Sunset. Can be closed during rain and for two days after rain or according to emergency closure.

All Trail Easements listed in FTSP, within the OCTA Project Plan - Ferber parcel, O'Neill Parcel, Hafen Parcel, shall be dedicated for local riding and hiking trails per the Recreational Component of FTSP, prior to project approval. Just in case their endowments in frugality go bankrupt, the Trabuco Community deserves protection toward the strategic intent of the FTSP COMMUNITY TRAIL MASTERPLAN.

The balance of any other trails and the Core of Ferber Parcel, O'Neill Oaks Parcel, Hafen Parcel can be managed according to RMP and Preserve objectives.

The Trabuco community is and has been the support of the conservation, preservation goals. **The objective is to support the NCCP but maintain the integrity of our historical equestrian community and keep out of harm's way.**

48-1
cont.

We are and have been first responders in case of fire and floods within Foothill Trabuco. We are your support. The community is the eyes and ears of what has protected and will continue to protect this so deserving community.

Define our trail easements and high priority legal trail access, add proper trail fencing and trail signage; we will flourish along with our amazing ecosystem, habitat and wild life corridors.

Respectfully submitted,



Delma Johnson, Friends of Trabuco Trails/ Trabuco Community

Cc: Delmajohnson17@gmail.com 949/858-0187

P.O. Box 435, Trabuco Canyon, CA 92678

cc: Todd Spitzer, OC Supervisor, 3rd District & OCTA Board of Directors.
Todd.Spitzer@ocgov.com
333 W. Santa Ana, CA92701 714/560-6282

Info@toddspitzer.com 714/552-0877 Election Headquarters

cc: Laree Brommer, Planning Manager, County of Orange 714/667-9649
laree.brommer@ocpw.ocgov.com

cc: OCTA/ Citizens Advisory Committee Alice Rogan, Strategic Communications Manager 714-560-5577
arogan@octa.net

cc: Jeff Dickman, Trail Coordinator - Planner IV (714) 647-3937
OC Public Works, Project Development
300 N. Flower St. Santa Ana, CA 92703
Jeff.Dickman@ocpw.ocgov.com

cc: Stacy Blackwood Orange County Parks Commission- Executive Officer.
Stacy.blackwood@ocparks.com

48-1
cont.



Foothill Trabuco Specific Plan (FTSP):

Section I, Page 1: Introduction: Authorization and Purpose

In August 1988, the Orange County Board of Supervisors directed the Environmental Management Agency (EMA) to convert the then-existing, policy-level Foothill/Trabuco Feature Plan into a regulatory, zoning-level Specific Plan. The purpose of the Specific Plan effort was to set forth goals, policies, land use district regulations, development guidelines, and implementation programs in order to preserve the area's rural character and to guide future development in the Foothill/Trabuco area.

This document, in conjunction with the Orange County Zoning Code and other applicable ordinances, represents the Specific Plan for the Foothill/Trabuco area. It has been prepared in accordance with California Government Code (Sections 65250, et seq.). Unless otherwise provided for within this document, all future development in the Specific Plan Area must be found consistent with the Specific Plan Components, the Land Use District Regulations and the Development and Design Guidelines.

Section I, Page 5: Specific Plan Goals

1.0 Specific Plan Goals

- a. Rural Character/Forest Buffer: To preserve the rural character of the area and provide a buffer between urban development and the Cleveland National Forest.
- b. Resource Preservation: To preserve significant landform, biological and scenic resources.
- c. Development Potential: To ensure at least some development potential on each individual property.
- d. Circulation/Infrastructure: To provide for a circulation system and other infrastructure adequate to serve the ultimate level of development permitted.
- e. Equestrian/Recreational Opportunities: To provide equestrian and other recreational opportunities.

48-1
cont.

Section I, Page 8: Equestrian/Recreational Opportunities

5) Equestrian/Recreational Opportunities:

- a) Provide for a local riding and hiking trail system which includes connections to Regional Riding and Hiking Trails as designated on the Master Plan of Regional Riding and Hiking Trails of the Recreation Element of the General Plan.
- b) Preserve the Arroyo Trabuco/Trabuco Creek as permanent open space in order to: 1) provide a link between O'Neill Regional Park and the proposed Upper Trabuco Canyon Regional Park within the Cleveland National Forest; and 2) provide a critical link of the "mountains-to-the-sea" riding and hiking trail along Trabuco Creek as designated on the Master Plan of Riding and Hiking Trails in the Recreation Element of the General Plan.

Section II, Page 33:

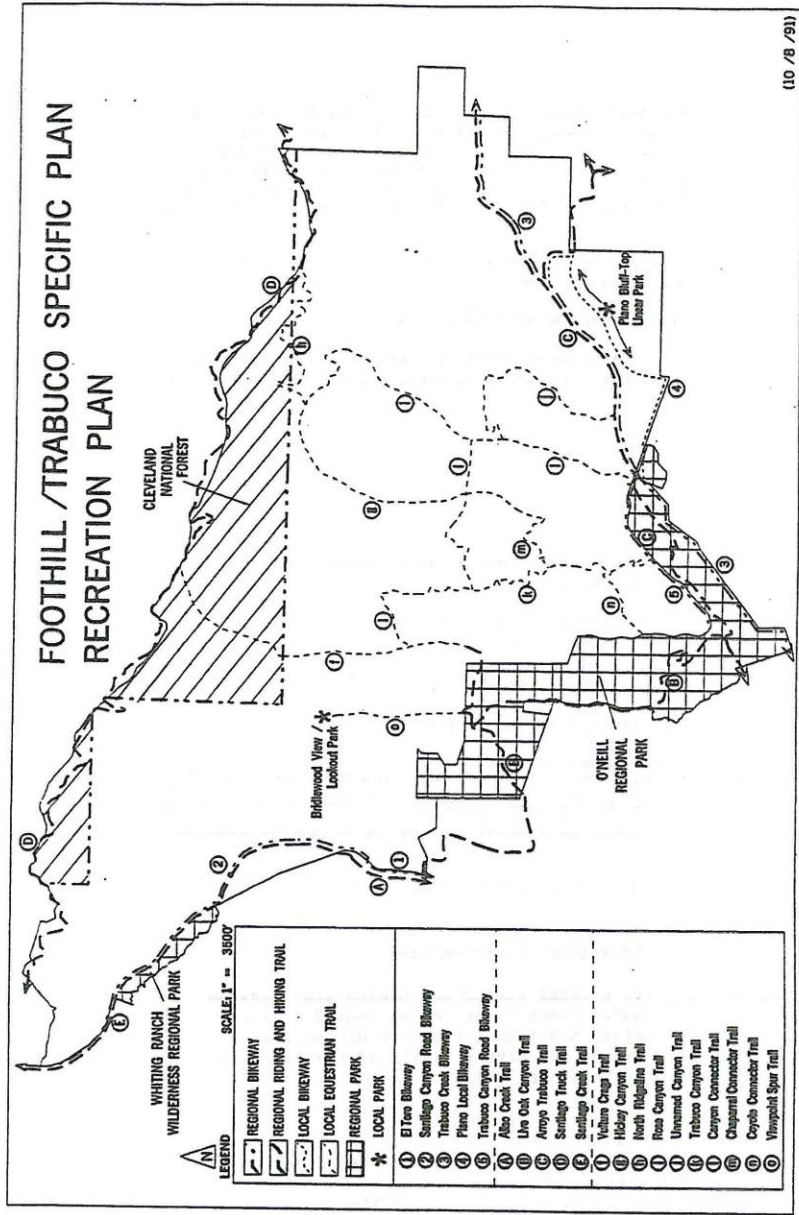


EXHIBIT II-8

48-1
cont.

Section II, Page 36:

4.0 Regional Riding and Hiking Trails

The regional trails listed below are located partially or entirely within the Specific Plan Area and identified on the County Master Plan of Regional Riding and Hiking Trails. As outlined in the goals, policies and objectives of the Master Plan, owners of parcels located adjacent to Master Plan trails shall be required to dedicate easements for trail purposes.

The Master Plan of Regional Trails are shown for reference purposes only on the Specific Plan's Recreation Plan. An amendment to the Master Plan of Regional Riding and Hiking Trails will not require an amendment to the Specific Plan. However, periodic updates of the Specific Plan will incorporate amendments of the Master Plan of Regional Trails into the Recreation Component.

4.1 Description of Individual Regional Riding and Hiking Trails

The letter identified below for each regional trail correspond to those on the Recreation Plan (Exhibit II-8).

Section II, Page 38: Local Riding and Hiking Trails and Implementation

5.0 Local Riding and Hiking Trails

A local riding and hiking trail network was established by the Interim Policy Guidelines for Foothill/Trabuco Area Projects (adopted November 15, 1988) prior to adoption of the Specific Plan. Many of the local riding and hiking trails identified on the Recreation Plan currently exist as unimproved trails on private property, although most have not been offered for dedication and do not meet County standards.

5.1 Implementation of Local Riding and Hiking Trails

Property owners with parcels adjacent to local riding and hiking trails depicted on the Specific Plan's Recreation Plan shall be required to dedicate a 16-foot-wide recreation easement for local riding and hiking trail purposes. Developers shall be required to design, improve and maintain the local trails in conformance with a plan approved by the Manager, EMA-Harbors Beaches and Parks/Program Planning Division.

The following conditions of approval will be applied during the area plan/site development permit/subdivision map approval process to ensure the implementation of local trails:

- a. Prior to the recordation of a final tract/parcel map, the subdivider shall irrevocably offer a 16-foot-wide recreation easement to the County of Orange or its designee for the trails depicted in the Recreation Plan for riding and hiking trail purposes in a manner meeting the approval of the Manager, Harbors, Beaches and Parks/Program Planning Division. The subdivider shall not grant any easement(s) over the property subject to the recreation easement unless such easements are first reviewed and approved by the Manager, Harbor, Beaches and Parks/Program Planning Division. Until such time as the easement is accepted by the County, maintenance and upkeep of the easement area shall be the responsibility of the subdivider or assigns and successors.

48-1
cont.

Section II, Page 38 & 39: Local Riding and Hiking Trails and Implementation (continued)

- b. Prior to the recordation of an applicable final tract/parcel map, the subdivider shall enter into an agreement and provide financial security to insure the installation of improvements, including necessary grading, erosion control, signage, fencing and other specified improvements which shall be installed in accordance with a plan approved by the Manager, Harbors, Beaches and Parks/Program Planning Division.
- c. The affected developer shall design, improve and maintain local riding and hiking trails in conformance with a plan approved by the Manager, Harbors, Beaches and Parks/Program Planning Division.
- d. The affected developer or assigns and successors in interest shall maintain local riding and hiking trails until such time as the County or its designee (i.e. Local Maintenance Entity) accepts the offer of dedication.

Section II, Page 39: Description of Individual Local Riding and Hiking Trails

5.2 Description of Individual Local Riding and Hiking Trails

The descriptions below are general in nature because final alignments cannot be determined until the actual area plan/site plan approval process.

The letters indicated prior to each trail name correspond to those on the Recreation Plan Map (Exhibit II-8).

f. Vulture Crag Trail

The Vulture Crag Trail commences at northern boundary of O'Neill Regional Park near the Goren properties and proceeds north parallel to Live Oak Canyon Road. The trail then gradually arches to the northeast through the National Forest until it links into the Santiago Truck Trail.

g. Hickey Canyon Trail

The trail begins on the northern edge of the Trabuco Oaks Community, between Rose Canyon and Trabuco Canyon, before proceeding northward through Hickey Canyon. After linking into the Canyon Connector Trail, the trail continues north in the canyon arching toward the Cleveland National Forest boundary and meeting Rose Canyon Trail.

h. North Ridgeline Trail

This trail commences at the connection of Rose Canyon and Hickey Canyon Trails just below the boundary of the National Forest. The trail proceeds east through the National Forest until linking into the Santiago Truck Trail.

i. Rose Canyon Trail

Beginning at the riding ring south of Live Oak Canyon Road inside O'Neill Regional Park, the trail proceeds northward along Rose Canyon Road for about one mile and links into the Canyon Connector Trail. Rose Canyon Trail continues north through Rose Canyon and veers west connecting with the Hickey Canyon Trail just south of the National Forest.

j. Unnamed Canyon Trail

The trail commences at the Arroyo Trabuco Regional Trail and proceeds north parallel to and east of Rose Canyon Trail. The trail proceeds north three-quarters of a mile through the Unnamed Canyon before it turns sharply west to link into Rose Canyon Trail.

48-1
cont.

48-1
cont.

Section II, Page 40: Description of Individual Local Riding and Hiking Trails (continued)

k. Trabuco Canyon Trail

The trail is aligned north/south through Trabuco Canyon, parallel to and east of Live Oak Canyon Road. Commencing near the Trabuco Canyon Fire Station, the trail continues north through the canyon one mile before terminating at the Canyon Connector Trail. The Trabuco Canyon Trail also connects to the Chaparral Connector Trail to provide a link to the Trabuco Oaks Community.

l. Canyon Connector Trail

This trail runs east/west through Rose, Hickey and Trabuco Canyons. The trail commences at Live Oak Canyon Trail north of O'Neill Regional Park and then traverses the canyon in a "zigzag" orientation, for over a mile, before terminating at Rose Canyon Trail. Along its path the trail connects with the Trabuco Canyon, Hickey Canyon and Rose Canyon Trails.

m. Chaparral Connector Trail

This short trail is oriented east/west and connects the southern terminus of Hickey Canyon Trail at the Trabuco Oaks Community with the Trabuco Canyon Trail.

n. Coyote Connector Trail

This short trail runs east/west in a crescent shape to connect Live Oak Canyon Road to the Trabuco Canyon Trail. Its eastern terminus is one-quarter of a mile north of Trabuco Canyon Fire Station No. 18.

o. Viewpoint Spur Trail

The trail commences at O'Neill Regional Park's northern boundary west of Live Oak Canyon Road and continues due north for almost a mile where it terminates at the Bridlewood View/Lookout Local Park. The trail, at its southern terminus, connects to Live Oak Canyon Regional Riding and Hiking Trail.

Section III, Page 80: Animal Regulations

1.0 Purpose and intent.

The keeping of horses and other animals is an important aspect of the unique rural character of the Foothill/Trabuco area. The purpose of these regulations is to establish standards for the keeping of horses to ensure clean and sanitary conditions, and the health, safety and welfare of residents of the community and animals. (Informational note: The types, number and manner in which pets and animals are to be kept is further regulated by the Health, Sanitation and Animal Code by the Director of the County Health Care Agency.)

Section A-1

FOOTHILL/TRABUCO SPECIFIC PLAN PROJECT CONSISTENCY CHECKLIST

Introduction

The Foothill/Trabuco Specific Plan Project Consistency Checklist has been developed to assist applicants, EMA staff, interested parties and the Planning Commission in determining whether a project proposal is consistent with the Specific Plan. The Checklist includes only the key Regulations and Guidelines from the Specific Plan; however, all projects shall be required to be found consistent with all of the applicable Regulations and Guidelines included in the Specific Plan. (Refer to the individual Specific Plan Components (Chapter II), the Land Use District Regulations (Chapter III) and the Development and Design Guidelines Chapter IV) for a complete listing.)

The language in the Regulations/Guidelines indicates whether they are mandatory Regulations or non-mandatory Guidelines. "Shall" indicates a mandatory Regulation to which there are no exceptions, while "should" indicates a non-mandatory Guideline. Individual development proposals are not required to be consistent with each and every Guideline. The Planning Commission may approve deviations from the Guidelines; however, the Commission must find that the project is in overall compliance with the Guidelines and consistent with the Goals and Objectives of the Specific Plan.

Implementation

Prior to Planning Commission consideration of any Area Plan, Site Development Permit, Use Permit and/or concurrently processed subdivision map, EMA staff shall complete a Specific Plan Project Consistency Checklist for the project and shall make a determination regarding the project's consistency with the Specific Plan. Additional explanation/discussion of the project's consistency with each Regulation and Guideline shall be attached to the Checklist, as necessary. The Planning Commission shall review the completed Checklist in conjunction with consideration of any discretionary approval and shall utilize the Checklist as the basis for making the necessary findings that the project is in overall compliance with the Specific Plan and consistent with the Goals and Objectives of the Specific Plan.

Section A-15

Recreation Component

The project proposal is consistent with the Recreation Component, and the applicant shall offer to dedicate and improve the Master Plan Riding and Hiking Trails, Master Plan Bikeways, Local Riding and Hiking Trails and Local Parks affecting the property, as required by the Recreation Plan.

48-1
cont.

Response to Letter 48: Delma Johnson – 7/17/15

Comment 48-1 Response

Comment: The commenter asks if the Recreational Component of the Foothill/Trabuco Specific Plan (FTSP) has been included in the OCTA NCCP/HCP and Preserve RMPs. The commenter also provides specific comments on how trail segments of the FTSP intersect with the OCTA Preserves and asserts that the restriction of access to these trails has had various impacts to the Trabuco Canyon community

Response: As discussed above as part of the Master Response C (pages 9-226 to 9-229) of this Final EIR/EIS, OCTA will coordinate with the Wildlife Agencies, local agencies and stakeholder groups to address regional trail planning to the extent that proposed trails in the FTSP and other regional trails planning efforts intersects with the OCTA Preserves. The intent of the FTSP was to enable the County of Orange (County) to exact trail designations and other public uses through the conditions of an approval process if a property owner triggered the entitlement process by developing the property. Since OCTA acquired the Preserves for conservation purposes and not development, there was no triggering of the entitlement process which would require the County to approve the NCCP/HCP or related EIR/EIS. However, OCTA will coordinate with the County to the extent that regional trail planning efforts do not conflict with OCTA's primary objective of maintaining and protecting its Preserves for their habitat value.

The FTSP identifies a number of trails within the boundaries of the OCTA Preserves. Many of these trails traverse the OCTA Preserves and then continue on to privately owned lands and/or publicly owned lands that do not currently allow public access (see Figure 9-1). The trails depicted in the FTSP and how they relate to the OCTA Preserves are discussed in further detail on pages 9-226 to 9-229 of this Final EIR/EIS. No changes to the Plan or Final EIR/EIS are required as a result of this comment.

Please see Response 44-1 in reference to the impacts to the Trabuco Canyon community.

No changes to the Plan or Final EIR/EIS are required as a result of this comment.