

APPENDICES

to the

Fort Ord

Multi-Species Habitat Conservation Plan

Public Draft

Draft Environmental Impact Statement/

Environmental Impact Report

SCH #2005061119

October 2019

CEQA Lead Agency



Fort Ord Reuse Authority

NEPA Lead Agency



U.S. Fish and Wildlife Service

Prepared By



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Appendix A
Scoping Materials

Scoping Summary

Scoping involved in the EIS/EIR process is the process used to determine the focus and content of an EIS/EIR. During scoping periods there is solicitation for input on the potential topics proposed to be addressed in an EIS/EIR. Scoping also solicits input on the range of project alternatives and possible mitigation measures included in an EIS/EIR. The process of scoping can also assist in establishment of methods of assessment and in selecting environmental effects to be evaluated in detail in the EIS/EIR. Tools used in the scoping process typically include informal and formal stakeholder and interagency consultation, public scoping meetings, and publication of a NOI/NOP. The NOI and NOP notified the public of the proposed Fort Ord HCP, the intent to prepare the EIS/EIR, identified the Plan Area and proposed HCP Species, and described the planning and public review processes.

In order to solicit participation of responsible and coordinating federal, state, and local agencies and of the general public in determining the scope of the EIS/EIR, a Notice of Intent (NOI) (pursuant to NEPA) and a Notice of Preparation (NOP) (pursuant to CEQA) were published. The NOI was published in the *Federal Register* on September 29, 2004 (69 FR 188: 58181-58183). The NOP was submitted to the California State Clearinghouse on June 20, 2005, and distributed to interested agencies, organizations, and members of the public. Publication and distribution of the NOI and NOP initiated the process of the public scoping for the EIS/EIR. Copies of the NOI and NOP are included below.

The 30-day scoping period for the Fort Ord HCP EIS/EIR closed on October 29, 2004, during which public comments were received. Public scoping meetings in association with publication of the NOI were held during two different time periods on October 13, 2004, and were held in the FORA Conference Facility/Bride Center, located at 13th Street, Building 2925, Marina, California.

In addition, another scoping period was initiated with the submittal of the NOP on June 20, 2005, which extended until July 21, 2005, during which public comments were received. Two public scoping meetings were held regarding the NOP. These meetings were held on July 11 and July 13, 2005, at the FORA Conference Facility/Bridge Center, located at 13th Street, Building 2925, Marina, California. Comment letters were received in response to both the NOI and NOP from numerous parties during the respective public scoping periods. Main topics raised from comments and letters are listed below and scoping comments and letters are included in their entirety at the end of this Scoping Report.

Permit No.: TE-092476

Applicant: Scott Quinnell, Yucaipa, California.

The applicant requests a permit to take (survey by pursuit) the Quino checkerspot butterfly (*Euphydryas editha quino*) in conjunction with surveys throughout the range of the species in California for the purpose of enhancing its survival.

Permit No.: TE-091462

Applicant: Karen Drewe, Irvine, California.

The applicant requests a permit to take (harass by survey) the Quino checkerspot butterfly (*Euphydryas editha quino*) in conjunction with surveys throughout the range of the species in California for the purpose of enhancing its survival.

Permit No.: TE-090990

Applicant: The Catalina Island Conservancy, Avalon, California.

The applicant requests a permit to take (harass by survey, capture, handle, measure, sex, insert passive integrated transponder tags, radio-collar, vaccinate, administer veterinary medical treatments, captive propagate, collect blood and fecal samples, transport, and release) the Santa Catalina Island fox (*Urocyon littoralis catalinae*; fox) in conjunction with scientific research on the fox and feral cats, and feral goat and pig removal on Santa Catalina Island, California, for the purpose of enhancing its survival.

Permit No.: TE-093151

Applicant: Richard Rivas, Fair Oaks, California.

The applicant requests a permit to take (capture and collect and sacrifice) the Conservancy fairy shrimp (*Branchinecta conservatio*), the longhorn fairy shrimp (*Branchinecta longiantenna*), the Riverside fairy shrimp (*Streptocephalus wootoni*), the San Diego fairy shrimp (*Branchinecta sandiegonensis*), and the vernal pool tadpole shrimp (*Lepidurus packardii*) in conjunction with surveys throughout California for the purpose of enhancing their survival.

Permit No.: TE-092469

Applicant: Ingrid Chlup, Santa Ana, California.

The applicant requests a permit to take (capture and collect and sacrifice) the Conservancy fairy shrimp (*Branchinecta conservatio*), the longhorn fairy shrimp (*Branchinecta longiantenna*), the Riverside fairy shrimp (*Streptocephalus wootoni*), the San Diego fairy shrimp (*Branchinecta*

sandiegonensis), and the vernal pool tadpole shrimp (*Lepidurus packardii*) in conjunction with surveys in southern California for the purpose of enhancing their survival.

Permit No.: TE-093150

Applicant: Melissa Olson, Murrieta, California.

The applicant requests a permit to take (survey by pursuit) the Quino checkerspot butterfly (*Euphydryas editha quino*) in conjunction with surveys throughout the range of the species in California for the purpose of enhancing its survival.

Permit No.: TE-093149

Applicant: Dean Blinn, Flagstaff, Arizona.

The applicant requests a permit to take (collect) the Amargosa pupfish (*Cyprinodon nevadensis*) in conjunction with research in Nye County, Nevada, for the purpose of enhancing its survival.

Permit No.: TE-080774

Applicant: U.S. Mendocino National Forest, Arcata, California.

The permittee requests an amendment to take (collect tissue, use video cameras in burrows, and excavate burrows to locate dead beavers) the Point Arena Mountain Beaver (*Aplodontia rufa nigra*) in conjunction with scientific research in Mendocino County, California, for the purpose of enhancing its survival.

We solicit public review and comment on each of these recovery permit applications.

Dated: September 15, 2004.

John Engbring,

Acting Manager, California/Nevada Operations Office, U.S. Fish and Wildlife Service.

[FR Doc. 04-21823 Filed 9-28-04; 8:45 am]

BILLING CODE 4310-55-P

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service**

Notice of Intent To Prepare an Environmental Document for Issuance of an Incidental Take Permit Associated With a Habitat Conservation Plan at the Fort Ord Military Installation, Monterey County, CA

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of intent.

SUMMARY: Pursuant to the National Environmental Policy Act (NEPA) (42

U.S.C. 4321, *et seq.*), the U.S. Fish and Wildlife Service (Service) advises the public that we intend to perform a scoping process to gather information necessary to help develop a NEPA document and determine whether to prepare an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) on the proposed Habitat Conservation Plan (HCP) for the former Fort Ord Federal military installation in Monterey County, California. The decision to prepare an EIS or EA is, in part, contingent upon the complexity of issues identified during and following the scoping phase of the NEPA process. The proposed Fort Ord HCP is being prepared in compliance with the Federal Endangered Species Act of 1973, as amended (ESA) (16 U.S.C. 1531 *et seq.*).

The HCP is meant to support the issuance of incidental take permits to the Fort Ord Reuse Authority (FORA), State Parks, University of California at Santa Cruz, California State University at Monterey Bay, and the County of Monterey (the Applicants) from the Service under section 10(a)(1)(B) of the ESA and from the California Department of Fish and Game (CDFG) under section 2081 of the California Fish and Game Code in compliance with the California Endangered Species Act (CESA).

We provide this notice to:

- (1) Advise other Federal and State agencies, affected tribes, and the public of our intent to prepare an EA or an EIS;
- (2) Announce the initiation of a 30-day public scoping period; and
- (3) Obtain suggestions and information on the scope of issues and alternatives to be considered in the scoping process.

DATES: Public scoping meetings will be held on: Wednesday, October 13, 2004, from 3:30 p.m. to 5:30 p.m. and 7 p.m. to 9 p.m. Written comments should be received on or before October 29, 2004.

ADDRESSES: The public meeting will be held in the FORA Conference Facility/Bridge Center, 13th Street, Building 2925, Marina, CA 93933. Information, written comments, or questions related to the preparation of the EA or EIS and the NEPA process should be submitted to the U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office, 2493 Portola Road, Suite B, Ventura, California 93003; or FAX (805) 644-1766.

FOR FURTHER INFORMATION CONTACT: Diane Steeck at the above Ventura address, or at (805) 644-1766.

SUPPLEMENTARY INFORMATION:

Reasonable Accommodation

Persons needing reasonable accommodations in order to attend and participate in the public meeting should contact Marilyn Bishop of the Ventura Fish and Wildlife Office at 805-644-1766 as soon as possible. In order to allow sufficient time to process requests, please call no later than 1 week before the public meeting. Information regarding this proposed action is available in alternative formats upon request.

Background

The Former Fort Ord

The former Fort Ord military installation spans 28,000 acres near the cities of Seaside, Sand City, Monterey, Del Rey Oaks and Marina in Monterey County, California. Fort Ord was established in 1917 as a training for infantry troops. It was expanded for use as a maneuver and training ground for field artillery and cavalry troops stationed at the Presidio of Monterey. The 1991 Defense Base Realignment and Closure Commission recommended that Fort Ord be closed. The base was closed in September 1994.

Closure, disposal and reuse of former Fort Ord required consultation between the U.S. Department of the Army (Army) and the Service under section 7 of the ESA because the Army's actions potentially affected several species listed as threatened or endangered or proposed for listing under the ESA. As a result of that consultation, the Service issued a biological opinion on October 19, 1993, and subsequent biological and conference opinions in 1997, 1999, and 2002, finding that no jeopardy to federally listed plant and animal species or plants and animals proposed for listing would result from the Army's actions. A key provision of the Army's project description was the development and implementation of a habitat management plan (HMP) to minimize incidental take of listed species and their habitat and to mitigate for impacts to vegetation and wildlife resources resulting from the Army's actions. In the 1993 biological opinion, the Service also recommended that the Army's HMP consider all proposed and candidate species for Federal listing and other special-status species.

In response to this requirement, the Army developed the HMP with input from Federal, State, and local agencies and organizations concerned with the natural resources and reuse of Fort Ord. The Service, the Bureau of Land Management (BLM), CDFG, the California Department of Parks and Recreation (State Parks), the University

of California (UC), the Fort Ord Reuse Authority (FORA) and other members of the local Monterey Bay area community were all active participants in the development of the HMP. The HMP thus describes a cooperative Federal, State, and local conservation program for plant and animal species and habitats of concern known to occur at Fort Ord.

The HMP's conservation program establishes land use categories and habitat management requirements for all lands on the former base. Developable lands and habitats reserve areas are defined along with habitat corridors and restricted development areas. Resources conservation and management requirements are described and responsible parties for each designated habitat area on the former base are identified.

While the conservation program established by the HMP is intended to be a comprehensive program for the former base, it stems from an agreement between the Army and the Service and does not exempt other landowners (existing or future) of transferred property from ESA section 9 prohibitions against take of listed species or from compliance with the provisions of CESA. Under the ESA, the following activities are defined as take: harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect listed animal species, or attempt to engage in such conduct (16 U.S.C. 1538). However, the HMP was also produced with the intent of benefiting all parties involved in the reuse of the former base by establishing a basis for regulatory compliance for other landowners of transferred property. The HMP was intended to serve as the basis for the proposed HCP and to support the possible issuance of incidental take permits under section 10(a)(1)(B) of the ESA to non-Federal land recipients.

Habitat Conservation Plan (HCP)

The Service has recommended that all non-Federal entities acquiring lands at the former Fort Ord apply for section 10(a)(1)(B) incidental take permits for all species covered in the HMP (Covered Species). In addition, CDFG requires non-Federal entities to obtain incidental take permits pursuant to section 2081 of the California Fish and Game Code if State-listed species will be taken. Seven animal species that are either listed, candidates, or designated species of concern are proposed Covered Species under the HCP, including: Smith's blue butterfly (*Euphilotes enoptes smithi*), California linderiella (*Linderiella occidentalis*), California red-legged frog (*Rana aurora draytoni*), California tiger

salamander (*Ambystoma californiense*), California black legless lizard (*Anniella pulchra nigra*), Western snowy plover (*Charadrius alexandrinus nivosus*), and Monterey ornate shrew (*Sorex ornatus salarius*). Eleven plant species that are either listed, candidate, or species of concern are also proposed Covered Species under the HCP, including: Sand gilia (*Gilia tenuiflora* ssp. *arenaria*), Monterey spineflower (*Chorizanthe pungens* var. *pungens*), Robust spineflower (*Chorizanthe robusta* var. *robusta*), Seaside bird's-beak (*Cordylanthus rigidus* var. *littoralis*), Toro manzanita (*Arctostaphylos montereyensis*), Sandmat manzanita (*Arctostaphylos pumila*), Monterey ceanothus (*Ceanothus cuneatus* var. *rigidus*), Eastwood's ericameria (*Ericameria fasciculata*), Coast wallflower (*Erysimum ammophilum*), Yadon's piperia (*Piperia yadoni*), and Hooker's manzanita (*Arctostaphylos hookeri*). To apply for such permits, applicants must submit a conservation plan along with their applications. The HCP, integrating key components of the HMP with additional elements required of an HCP (pursuant to 50 CFR 17.22(b)) is being prepared to provide a stand-alone HCP that is satisfactory to the Service and CDFG.

Incidental take of Covered Species is proposed to occur as the former base is redeveloped consistent with the HCP. The proposed activities covered in the draft HCP include rehabilitation and construction of roads, utilities and other infrastructure to support new research/educational, residential, commercial, light industrial, recreational and other development, generating approximately 18,000 jobs. Management activities on non-federal lands such as weed control, fencing, and burning will also be included as proposed covered activities in the HCP. About 12,000 housing units are anticipated to be constructed on the former base supporting a population of about 37,000 people. To accommodate this growth and development, up to 6,000 acres of existing habitat on the former base will be removed. However, the base-wide program for habitat preservation and management of approximately 17,600 acres of lands on former Fort Ord is intended to minimize and fully mitigate losses to Covered Species and their habitats that would result from base redevelopment. The requested permit term is 50 years.

NEPA Document

The EA or EIS will consider the proposed action, the issuance of a section 10(a)(1)(B) permit under the Act, and a reasonable range of alternatives. A detailed description of the impacts of

the proposed action and each alternative will be included in the EA or EIS. Several alternatives, including a No Action Alternative, will be considered and analyzed, representing varying levels of conservation, impacts, and permit area configurations. The No Action alternative means that the Service would not issue a section 10(a)(1)(B) permit.

The EA or EIS will identify potentially significant direct, indirect, and cumulative impacts on biological resources, land use, air quality, water quality, water resources, economics, and other environmental issues that could occur with the implementation of the Service's proposed actions and alternatives. For all potentially significant impacts, the EA or EIS will identify avoidance, minimization, and mitigation measures to reduce these impacts where feasible, to a level below significance. Where possible, we intend to incorporate by reference applicable sections from existing documents, such as the Army's 1993 EIS and 1996 Supplemental EIS on Fort Ord disposal and reuse.

Review of this project will be conducted in accordance with the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*), NEPA regulations (40 CFR parts 1500-1508) found at (<http://www.legal.gsa.gov>), other appropriate Federal laws, and Service policies and

procedures for compliance with those regulations. This notice is being furnished in accordance with 40 CFR 1501.7 of NEPA to obtain suggestions and information from other agencies and the public on the scope of issues and alternatives to be addressed in the EA or EIS. The primary purpose of the scoping process is to identify important issues raised by the public, related to the proposed action. Written comments from interested parties are welcome to ensure that the full range of issues related to the permit request is identified. Written comments are encouraged, and we will accept written comments at the public meetings. In addition, you may submit written comments by mail or facsimile transmission (*see ADDRESSES*). All comments received, including names and addresses, will become part of the official administrative record and may be made available to the public.

Dated: September 21, 2004.

Ron Cole,

Deputy Manager, California/Nevada Operations Office, U.S. Fish and Wildlife Service.

[FR Doc. 04-21813 Filed 9-28-04; 8:45 am]

BILLING CODE 4310-55-M

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Issuance of Permits

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of issuance of permits for marine mammals.

SUMMARY: The following permits were issued.

ADDRESSES: Documents and other information submitted with these applications are available for review, subject to the requirements of the Privacy Act and Freedom of Information Act, by any party who submits a written request for a copy of such documents to: U.S. Fish and Wildlife Service, Division of Management Authority, 4401 North Fairfax Drive, Room 700, Arlington, Virginia 22203; fax (703) 358-2281.

FOR FURTHER INFORMATION CONTACT: Division of Management Authority, telephone (703) 358-2104.

SUPPLEMENTARY INFORMATION: Notice is hereby given that on the dates below, as authorized by the provisions of the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361, *et seq.*), the Fish and Wildlife Service issued the requested permit(s) subject to certain conditions set forth therein.

Marine Mammals

Permit number	Applicant	Receipt of application Federal Register notice	Permit issuance date
086649	Philip A. Teel	69 FR 30715; May 28, 2004	August 5, 2004
089464	Randy C. Brooks	69 FR 40965; July 7, 2004	September 7, 2004

Dated: September 17, 2004.

Monica Farris,

Senior Permit Biologist, Branch of Permits, Division of Management Authority.

[FR Doc. 04-21783 Filed 9-28-04; 8:45 am]

BILLING CODE 4310-55-P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

Aquatic Nuisance Species Task Force Gulf of Mexico Regional Panel Meeting

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of meeting.

SUMMARY: This notice announces a meeting of the Aquatic Nuisance Species (ANS) Task Force Gulf of Mexico Regional Panel. The meeting topics are identified in the

SUPPLEMENTARY INFORMATION.

DATES: The Gulf of Mexico Regional Panel will meet from 1 p.m. to 5 p.m. on Monday, November 8, 2004, 8:30 a.m. to 5 p.m. on Tuesday, November 9, 2004, and 8:30 a.m. to 12 p.m. on Wednesday, November 10, 2004. Minutes of the meeting will be available for public inspection during regular business hours, Monday through Friday.

ADDRESSES: The Gulf of Mexico Regional Panel meeting will be held at the Palace Resort and Hotel, 158 Howard Avenue, Biloxi, MS 39530. Phone 228-432-8888. Minutes of the meeting will be maintained in the office of Chief, Division of Environmental Quality, U.S. Fish and Wildlife Service, Suite 322, 4401 North Fairfax Drive, Arlington, Virginia 22203-1622.

FOR FURTHER INFORMATION CONTACT: Ron Lukens, Gulf of Mexico Panel Chair, Assistant Director, Gulf States Marine Fisheries Commission, PO Box 726, Ocean Springs, MS 39566, 228-875-

5912, or Everett Wilson, U.S. Fish and Wildlife Service at 703-358-2148.

SUPPLEMENTARY INFORMATION: Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (5 U.S.C. app. I), this notice announces meetings of the Aquatic Nuisance Species Task Force Gulf of Mexico Regional Panel. The Task Force was established by the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990. The Gulf of Mexico Regional Panel was established by the ANS Task Force in 1999 and is comprised of representatives from Federal, State, and local agencies and from private environmental and commercial interests.

The purpose of the Panel is to advise and make recommendations to the Aquatic Nuisance Species Task Force on issues relating to the Gulf of Mexico region of the United States that includes: Alabama, Florida, Louisiana,

**FORT ORD REUSE AUTHORITY
NOTICE OF PREPARATION (NOP) OF EIR**

PROJECT TITLE: Habitat Conservation Plan for the former Fort Ord

LEAD AGENCY NAME AND ADDRESS:

Fort Ord Reuse Authority
100 12th Street, Building 2880, Marina, CA 93933

CONTACT: Mr. Steven Endsley, Director of Planning and Finance, Fort Ord Reuse Authority

The Fort Ord Reuse Authority (FORA) will be the Lead Agency and will prepare an Environmental Impact Report (EIR) for the project identified below. FORA would like to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project location, description, and potentially significant environmental impacts are presented below.

COMMENTS: FORA invites your comments on the scope and issues to be studied in the EIR. Due to time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. **Please direct your written comments prior to July 21, 2005 to Mr. Steven Endsley, Director of Planning and Finance**, Fort Ord Reuse Authority, 100 12th Street, Building 2880, Marina, CA 93933. Please include the name of a contact person in your agency.

PROJECT TITLE: Fort Ord Habitat Conservation Plan

PROJECT APPLICANT: Fort Ord Reuse Authority (FORA)

Two public scoping meetings will be held on July 11, 2005, at 6 p.m. and July 13, 2005 at 4:30 p.m., to obtain public and agency input on the scope and issues that should be evaluated in the EIR. The hearing will be held at the FORA Conference Facility/Bridge Center, located at 13th Street, Building 2925, Marina, California 93933. If you have any questions regarding the project, this NOP, or the EIR process, please contact Mr. Steven Endsley at 831-883-3672.

Sincerely,



Date: June 20, 2005

Michael Houlemard
Executive Officer, Fort Ord Reuse Authority

I. INTRODUCTION

Purpose of a Notice of Preparation (NOP): The California Environmental Quality Act (CEQA) requires that the scope of an EIR will be determined by consulting with responsible state and local agencies that have jurisdiction or responsibility for natural resources affected by the project and/or permitting authority over the project, and with federal agencies involved in approving or funding the project. The responses from each agency shall identify the environmental issues and reasonable alternatives and mitigations measures that the agency will need to have explored in the Draft EIR. This scoping process will be helpful to identify and confirm the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in the EIR and also to help identify those issues found not to be important and therefore which could be eliminated from detailed study.

Project: The Ford Ord Reuse Authority (FORA), acting as lead agency under CEQA, is preparing an Environmental Impact Report (EIR) to analyze the potential impacts of the issuance of federal and state Incidental Take Permits with a Habitat Conservation Plan (HCP) and Implementing Agreement (IA), in compliance with the federal and state Endangered Species Act. The impacts from a range of alternatives will also be analyzed. Based on background studies and analysis to date, FORA has found that the project may have a significant effect on the environment. (Refer to Section II of this NOP for a full project description).

Response Process: Due to the time limits mandated by State law, responses must be sent at the earliest possible date but not later than 30 days after receipt of this notice. If you are a responsible agency, please indicate the name and contact information for the contact person(s) in your agency. **Please send all responses no later than July 21, 2005** to Mr. Steven Endsley, Director of Planning and Finance, at the address above.

Early Public Consultation and Public Scoping Meeting: FORA will hold two public scoping meetings on **July 11, 2005, at 6 p.m., and July 13, 2005, at 4:30 p.m.**, at the FORA Conference Facility/Bridge Center, located at 13th Street, Building 2925, Marina, California to solicit verbal input on the scope and issues to be addressed in the EIR. All interested agency representatives and persons from the public are invited.

II. PROJECT HISTORY, OBJECTIVES AND DESCRIPTIONS

History and Background: The former Fort Ord military installation spans 28,000 acres near the cities of Seaside, Sand City, Monterey, Del Rey Oaks and Marina in Monterey County, California (Figure 1). Fort Ord was established in 1917 as training for infantry troops. It was expanded for use as a maneuver and training ground for field artillery and cavalry troops stationed at the Presidio of Monterey. The 1991 Defense Base Realignment and Closure Commission recommended that Fort Ord be closed. The base was closed in September 1994.

Closure, disposal and reuse of former Fort Ord required consultation between the U.S. Department of the Army (Army) and the Service under section 7 of the federal Endangered Species Act (ESA) because the Army's actions potentially affected several species listed as threatened or endangered or proposed for listing under the ESA. As a result of that consultation, the Service issued a biological opinion on October 19, 1993, and subsequent biological and conference opinions in 1997, 1999, and 2002, finding that no jeopardy to federally listed plant and animal species or plants and animals proposed for listing would result from the Army's actions. A key provision of the Army's project description was the development and implementation of a Habitat Management Plan (HMP) to minimize incidental take of listed species and their habitat and to mitigate for impacts to vegetation and wildlife resources resulting from the Army's actions. In the 1993 biological opinion, the Service also recommended that the Army's HMP consider all proposed and candidate species for Federal listing and other special-status species.

In response to this requirement, the Army developed the HMP with input from Federal, State, and local agencies and organizations concerned with the natural resources and reuse of Fort Ord. The Service, the Bureau of Land Management (BLM), California Department of Fish and Game (CDFG), the California Department of Parks and Recreation (State Parks), the University of California (UC), the Fort Ord Reuse Authority (FORA) and other members of the local Monterey Bay area community were all active participants in the development of the HMP. The HMP thus describes a cooperative federal, state, and local conservation program for plant and animal species and habitats of concern known to occur at Fort Ord.

The HMP's conservation program establishes land use categories and habitat management requirements for all lands on the former base. Developable lands and habitats reserve areas are defined along with habitat corridors and restricted development areas. Resources conservation and management requirements are described and responsible parties for each designated habitat area on the former base are identified.

While the conservation program established by the HMP is intended to be a comprehensive program for the former base, it stems from an agreement between the Army and the Service and does not exempt other landowners (existing or future) of transferred property from complying with environmental laws and regulations enforced by federal, state, and local agencies, including the federal ESA section 9 prohibitions against take of listed species or from compliance with the provisions of state ESA. Under the ESA, the following activities are defined as take: harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect listed animal species, or attempt to engage in such conduct (16 U.S.C. 1538). The HMP was intended to serve as the basis for the proposed HCP and to support the possible issuance of incidental take permits under section

10(a)(1)(B) of the federal ESA and section 2081 of the state ESA to non-Federal land recipients. To apply for such permits, applicants must submit a conservation plan along with their applications [50 CFR 17.22(b)]. Pursuant to 50 CFR 17.22(b)(1)(iii), the conservation plan must contain certain specific elements. While the HMP prepared by the Army contains many of the required elements, it does not contain them all. Thus, an HCP, integrating key components of the HMP with additional elements required of an HCP, has been prepared to provide a stand-alone HCP that is satisfactory to the Service and CDFG. In addition, an Implementing Agreement (IA) for the HCP contains further details on the obligations and commitments of the parties who will obtain permits and provides assurances for both those parties and the resource agencies relative to implementation of the HCP.

The issuance of an incidental take permit as supported by the HCP is a federal action subject to the National Environmental Policy Act (NEPA) compliance. Because it is known at this time that CEQA compliance will be required for the issuance of a Section 2081 Incidental Take Permit under the California ESA, a joint NEPA/CEQA document will be prepared. Depending on the scope and impact of the HCP, NEPA requirements can be satisfied by one of two following documents or actions: an Environmental Assessment (EA) or an Environmental Impact Statement (EIS).¹ In the case of the proposed Fort Ord HCP, the decision to prepare an EIS or an EA has not been finalized. *A Notice of Intent to Prepare an Environmental Document for Issuance of an Incidental Take Permit with a Habitat Conservation Plan* has been published in the Federal Register (Vol. 69, No. 188, September 29, 2004) by the U.S. Fish and Wildlife Service.

Project Goals and Objectives: The Fort Ord HCP's goal is to maintain the viability of populations of Covered Species and their habitats by preserving, protecting, and enhancing the populations of the Covered Species and preserving and enhancing ecosystem function in the designated Conserved Habitat Areas.

This goal will be achieved by the designation of 16,195 acres of the 27,827-acre installation as Conserved Habitat Areas (Figure 2). These large, contiguous, and biologically diverse habitat parcels are being transferred to natural resource management agencies such as BLM, State Parks, and UC for conservation and beneficial enhancement of the habitat. An additional 398 acres will be transferred to Monterey County and will be managed as a Habitat Corridor with allowance for development of 53 acres to support a youth camp. Another 2,166 acres are designated, and will be managed as, Development with Reserve Areas or Development with Restrictions. These parcels accommodate development but require implementation of natural resource conservation and management requirements as described in the HCP. The remaining 9,068 acres are designated as Development parcels that are either already developed (approximately 6,000 acres) or are planned for development under the FORA Reuse Plan prepared to facilitate economic recovery of the area following base closure. Although the majority of the development parcels can be developed without resource conservation or management requirements, some development parcels located adjacent to Conserved Habitat Areas are required to implement short and long-term resource conservation/management requirements to prevent impacts to the adjacent habitat reserve areas.

¹ An EIS is required when the project or activity that would occur under the HCP is a major federal action significantly affecting the quality of the human environment and culminates in a Record of Decision (ROD). An EA is prepared when it is unclear whether an EIS is needed, or when the project does not require an EIS but is not eligible for a categorical exclusion and results in either a decision to prepare an EIS or a Finding of No Significant Impact (FONSI). Activities that do not individually or cumulatively have a significant effect on the environment can be categorically excluded from NEPA.

Project Location: The area covered by the HCP is the former Army military facility known as Fort Ord. The former Fort Ord occupies approximately 28,000 acres (approximately 45 square miles) of land along the Pacific Ocean, 100 miles south of San Francisco, California. The site is located in northern Monterey County; approximately 73% of the former base (20,537 acres) lies within unincorporated Monterey County lands, with about 15% (4,122 acres) within the city limits of the City of Seaside and about 12% (3,361 acres) within the city limits of the City of Marina. The cities of Sand City, Del Rey Oaks, and Monterey also share boundaries with Former Fort Ord.

Project Description: The Service has recommended that all non-Federal entities acquiring lands at the former Fort Ord apply for section 10(a)(1)(B) incidental take permits for all species covered in the HMP (Covered Species). In addition, CDFG requires non-Federal entities to obtain incidental take permits pursuant to section 2081 of the California Fish and Game Code if state-listed species will be taken. Seven animal species and twelve plant species that are either listed, candidates, or designated species of concern are proposed Covered Species under the HCP (Table 1).

Table 1: List of Covered Plant and Animal Species

	Scientific Name	Common Name
Plants	<i>Gilia tenuiflora</i> ssp. <i>arenaria</i> <i>Lasthenia conjugens</i> <i>Piperia yadoni</i> <i>Chorizanthe pungens</i> var. <i>pungens</i> <i>Chorizanthe robusta</i> var. <i>robusta</i> <i>Cordylanthus rigidus</i> var. <i>littoralis</i> <i>Arctostaphylos montereyensis</i> <i>Arctostaphylos pumila</i> <i>Ceanothus cuneatus</i> var. <i>rigidus</i> <i>Ericameria fasciculata</i> <i>Erysimum ammophilum</i> <i>Arctostaphylos hookeri</i>	sand gilia Contra Costa goldfields Yadon's piperia Monterey spineflower robust spineflower seaside bird's beak Toro manzanita sandmat manzanita Monterey ceanothus Eastwood's ericameria coast wallflower Hooker's manzanita
Animals	<i>Euphilotes enoptes smithi</i> <i>Charadrius alexandrinus nivosus</i> <i>Rana aurora draytoni</i> <i>Ambystoma tigrinum californiense</i> <i>Linderiella occidentalis</i> <i>Sorex ornatus salaries</i> <i>Anniella pulchra nigra</i>	Smith's blue butterfly western snowy plover California red-legged frog California tiger salamander California linderiella Monterey ornate shrew black legless lizard

To apply for such permits, applicants must submit a conservation plan along with their applications. The HCP, integrating key components of the HMP with additional elements required of an HCP (pursuant to 50 CFR 17.22(b)) is being prepared to provide a stand-alone HCP that is satisfactory to the Service and CDFG.

Incidental take of Covered Species is proposed to occur as the former base is redeveloped consistent with the HCP. The proposed activities covered in the Draft HCP include rehabilitation and construction of roads, utilities and other infrastructure to support new research/educational, residential, commercial, light industrial, recreational and other development, generating approximately 18,000 jobs. Management activities on non-

federal lands such as weed control, fencing, and burning will also be included as proposed covered activities in the HCP. About 12,000 housing units are anticipated to be constructed on the former base supporting a population of about 37,000 people. To accommodate this growth and development, up to 6,000 acres of existing habitat on the former base will be removed. However, the base-wide program for habitat preservation and management of approximately 17,600 acres of lands on former Fort Ord is intended to minimize and fully mitigate losses to Covered Species and their habitats that would result from base redevelopment. The requested permit term is 50 years.

III. PROBABLE ENVIRONMENTAL EFFECTS

The environmental review of the project will focus on the following issues and probable environmental effects, as identified to date. The EIR will analyze the impacts resulting from the issuance of the federal and state Incidental Take Permits, which include the implementation of the HCP and IA, as well as the development and reuse of the former Fort Ord. Impacts will be analyzed for each significant impact identified in the EIR, based on thresholds of significance that meet state guidelines and accepted professional standards and practice. Mitigation measures will be identified to reduce significant impacts to less-than-significant level if available.

Land Use and Planning: The EIR will address land use compatibility and project compliance with applicable land use policies, including consistency with all applicable plans. Existing land uses on and surrounding the project site will be described and potential land use impacts assessed (i.e., compatibility with surrounding uses, consistency with plans and policies, effects on the community).

Aesthetics: The EIR will evaluate the visual effects of the project, based on existing visual characteristics, impacts to scenic views, proposed site layout/design, and density of development. The visual analysis will consider the policies on protection of views and aesthetics.

Air Quality: The EIR will describe the air quality of the area and provide an assessment of the potential air quality impacts of the project in compliance with the Monterey Bay Unified Air Pollution Control District guidelines. Short-term air quality impacts associated with construction related activities will also be addressed. This portion of the document will address short- and long-term air quality impacts associated with the project, including impacts from Army vegetation burns. Potential toxic air contaminants (TACs) from the project and certain management activities, including habitat management burn requirements, will also be evaluated.

Biological Resources: The former Fort Ord is located in a floristically diverse and unusual region. Eight broad categories of biological communities have been identified at Fort Ord: beaches, bluffs and coastal strand; disturbed dune; coastal scrub; maritime chaparral; coast live oak woodland and savanna; native grassland; annual grassland and wetlands. These habitat types and the impacts associated with the development of Fort Ord will be analyzed in this EIR. Impacts to special-status plant and animal species will also be analyzed.

Geology and Soils: The EIR will address potential soil, geologic, and geotechnical hazards on the site, based on a preliminary geotechnical/geologic report. Such hazards may include seismicity, problematic soil conditions, grading, and erosion.

Hydrology, Drainage and Water Quality: The EIR will address drainage, flooding, and water quality conditions within the former Fort Ord. Potential impacts from development could include increases in runoff and flooding potential, as well as degradation of water quality from increased erosion and sedimentation.

Noise: The EIR will describe the existing ambient noise levels in the vicinity. Noise impacts associated with construction, traffic generation, and exposure of new noise-sensitive receptors to sources of noise will be analyzed to insure their impacts are

minimized. Exposure of sensitive receptors to excessive noise levels will also be analyzed. Consequently, this EIR will address specific noise related impacts and their appropriate mitigation. Noise impacts from construction equipment (short-term) on nearby residential, recreational, and visitor-serving receptors will be quantified and analyzed.

Public Services/Utilities/Water Supply: The EIR will evaluate the existing public service systems serving the former Fort Ord and evaluate the public service impacts of the project, including increased demands for sanitary sewer, storm drain, park, emergency (fire and police protection), and school services. The EIR will describe the available water supply resources and projected demand for the reuse of Fort Ord and analyze potential impacts.

Hazardous Materials/Health and Safety: The former Fort Ord was added to the National Priorities List of Hazardous Waste Sites (Superfund List) on February 21, 1990. The Army is undergoing clean-up actions for hazardous, toxic, and radioactive waste. Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Army is required to remediate chemical contamination of soil and groundwater. The EIR will describe the presence of hazardous materials on the former Fort Ord and the status of the clean-up process. The EIR will address and evaluate the potential hazards associated with reuse and development within the former Fort Ord, including seismic safety as well as hazardous materials contamination.

Traffic and Circulation: The EIR will describe the existing and proposed roadway system, and evaluate traffic impacts. Traffic impacts, including degradation of levels of service on affected roadways and freeways, adequacy of site access, and provision of parking will be evaluated based on the Fort Ord Reuse Plan EIR.

Population and Housing: A direct increase in population would occur due to proposed housing components of the project and from the creation of new jobs. The population and housing analysis in the EIR will consider the trends in population statistics for the local area and region.

Cultural Resources: Potential cultural resource impacts from this project will be analyzed to assess if any significant historic, architectural, archaeological and cultural resources will be impacted due to the implementation of the project.

Socioeconomics: The reuse and development of the former Fort Ord may result in socioeconomic impacts due to population increase and housing demand. In addition, this portion of the document will evaluate the extent to which the proposed action would have an adverse impact on low-income and minority populations.

Growth Inducement: The EIR will evaluate the potential growth-inducing effects of the proposed development, including increases in jobs and housing, and improvements that may remove impediments to growth.

Cumulative Impacts: The EIR will evaluate the potential cumulative impacts of the project when combined with past, present and reasonably anticipated projects in the region. This evaluation will address (at a minimum) traffic, air quality, public services, and land use.

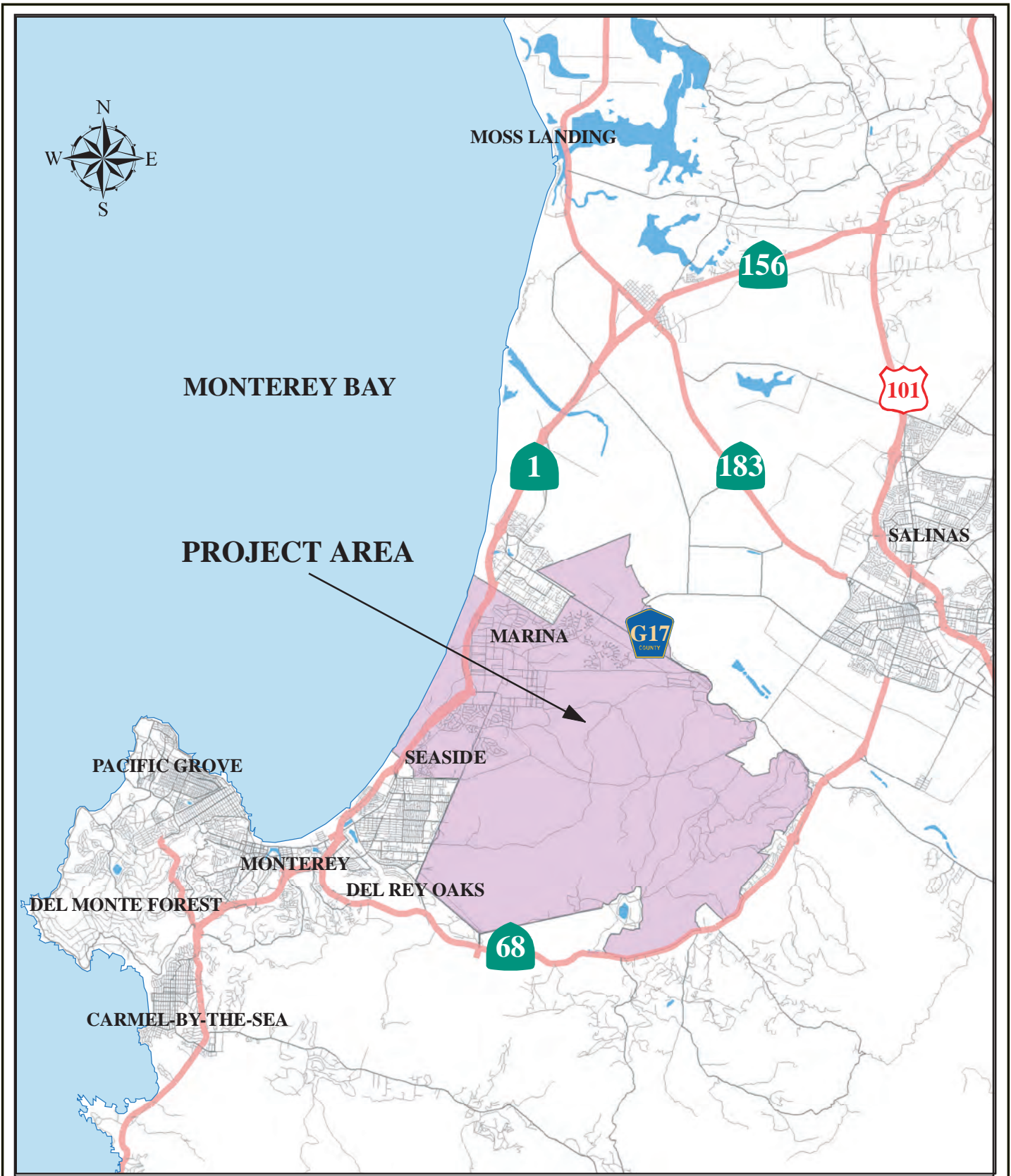
Alternatives and Mitigations: The EIR will consider a range of reasonable alternatives to the proposed project that could feasibly obtain most of the basic objectives of the proposed project, in accordance with CEQA Guidelines Section 15126.6. A key purpose of this NOP and the pending EIR will be to analyze and identify those alternatives and/or mitigation measures which minimize or eliminate environmental impacts while meeting the project objectives.

Alternatives to be considered in the environmental document will include those alternatives previously identified and any others that may come to light during the environmental review process.

Attachments:

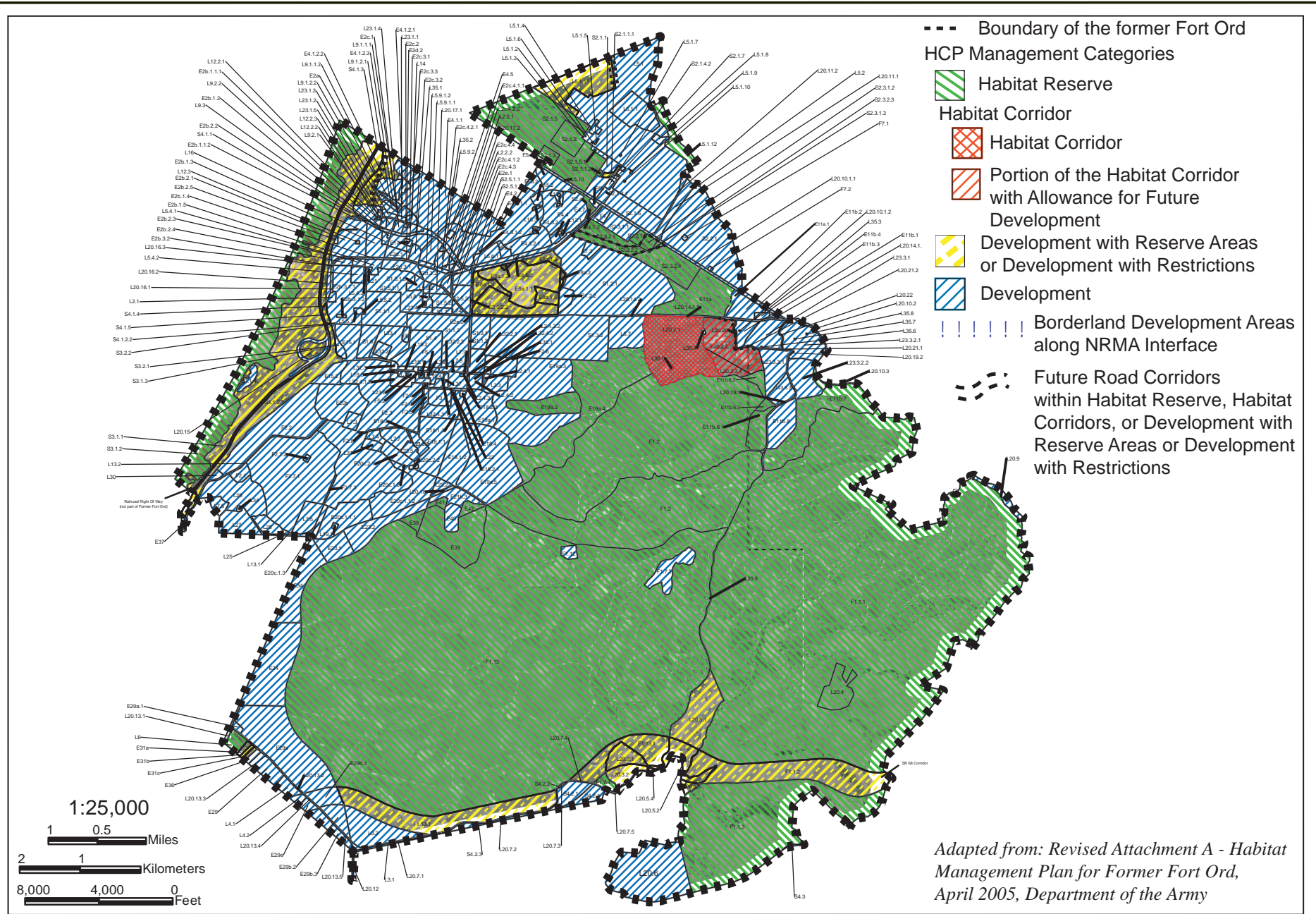
Figure 1: Vicinity Map

Figure 2: Habitat Conservation Plan Map



Vicinity Map

Figure
1



Habitat Conservation Plan Map

Figure
2

Issues of concern related to the EIS/EIR were expressed by general public sources and governmental (local, state, federal) sources during the scoping periods of the NOI/NOP. Key issues of concern that were identified relevant to the Fort Ord HCP EIS/EIR include:

- Issues related to air quality, including impacts resulting from implementation of the HCP (including prescribed burns and vehicle emissions), consistency with the Air Quality Management Plan, addressing the general conformity rule, and direct and indirect source emissions.
- Issues related to biological resources, including potential negative impacts from prescribed burns and mowing, invasion of non-native plant and animal species, adequacy of vegetation mapping, adaptive management, species to be analyzed in the EIS/EIR, potential impacts from domestic pets, habitat fragmentation, implementation of the vegetation management program and adequacy of funding, edge effects, and cumulative impacts.
- Issues related to referencing previous environmental and planning documents, and the relationship of the proposed HCP to previous environmental documentation.
- Wildfire issues related to the installation of adequate fuelbreaks, frequency and intensity of proposed prescribed burns, risk to human safety and health, and potential of natural wildfires.
- Issues regarding the consideration and identification of the location(s) of proposed water supply and other water facility projects on the former Fort Ord and inclusion of these projects in the cumulative impact analysis.

All of the above-identified key public issues (as well as additional relevant issues identified in the comment letters) are discussed in the analysis of project effects included in this EIS/EIR document. Any further comments received during the circulation of the EIS/EIR will be addressed in the responses to comments section of the Final EIS/EIR.

Where a comment did not raise an environmental issue or the issue was considered outside of the scope for the Fort Ord HCP, the issue was not included in the analysis for this EIS/EIR. The following issues identified during the scoping period were not included in this EIS/EIR because they reference actions that are beyond the scope of the proposed action and purpose and need/goals and objectives. These actions will be analyzed in project-specific environmental documents in the future:

- Opposition to the 6000-car parking lot planned by SCRAMP for Laguna Seca due to impacts to dune gilia and other sensitive species – requests information on project proposal and process.
- Concern about proposed Blanco Road extension due to impacts to wildlife corridor and sand gilia – requests information on project proposal and process.
- Requests that the EIS/EIR consider:
 - Identification of preferred corridors for pipelines and other water facilities;
 - Coordination with other infrastructure such as roads; and
 - Designate preferred areas for water supply facility development; for areas not identified, create a process to allow case-specific review or mitigation measures to enable location of lower-impact water project components such as wells.



Terry Tamminen
Agency Secretary

Air Resources Board

Alan C. Lloyd, Ph.D.
Chairman

1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov



Arnold Schwarzenegger
Governor

October 26, 2004

Ms. Diane K. Noda
United States Department of the Interior
Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

FISH AND WILDLIFE
SERVICE

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VENTURA, CA

Dear Ms. Noda:

Thank you for providing the Air Resources Board (ARB) the opportunity to review the draft *Installation-Wide Multispecies Habitat Conservation Plan for the Former Fort Ord* (Conservation Plan). We commend you for a comprehensive analysis of the many habitat conservation areas and management programs in the Conservation Plan.

We recognize that the objective of the Conservation Plan is the protection and enhancement of the native flora and fauna covered under the Endangered Species Act. Our review and comments are designed to ensure these activities can take place in a manner that precludes or minimizes health impacts on the public from air pollutant emissions. To that end, we recommend that the forthcoming environmental assessment (EA) includes an evaluation of potential impacts on air quality of the proposed activities in the Conservation Plan. Specifically, the evaluation should quantify emissions of volatile organic gases (VOCs), nitrogen oxides (NOx), particulate matter (PM), and air toxic compounds, and should assess their potential to contribute to violations of State and federal air quality standards. We recommend that the EA provide clear and concise documentation of the emission impact evaluations, including all assumptions that were used.

We note that a number of activities proposed in the Conservation Plan could potentially impact air quality, including prescribed burning, which has emissions of PM10, PM2.5, VOCs, and toxic air contaminants; construction and grading activities, which have emissions of PM10, PM2.5, and NOx; mowing activities, which have emissions of VOCs and NOx; and pesticide and herbicide applications, which have emissions of VOCs.

There is also the potential for air quality impacts from motor vehicle emissions (VOCs and NOx) associated with the planned uses of some of the habitat conservation areas, specifically parking lots proposed for borderlands, Fort Ord Dunes State Park, and

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

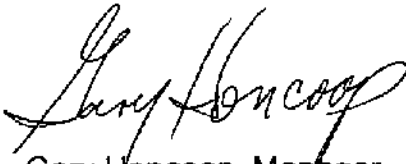
California Environmental Protection Agency

Ms. Diane K. Noda
October 26, 2004
Page 2

Laguna Seca. In addition, motor vehicle related events at Laguna Seca would also have motor vehicle emissions.

If you have any questions, please contact me at (916) 322-8474, or Mr. Elliot Mulberg of my staff at (916) 322-7047.

Sincerely,

A handwritten signature in cursive script that reads "Gary Honcoop". The signature is written in black ink and is positioned above the printed name.

Gary Honcoop, Manager
Strategic Analysis and Liaison Section

cc: Ms. Janet Brennan
Monterey Bay Unified Air Pollution
Control District
24580 Silver Cloud Court
Monterey, CA 93940

Monterey Bay Chapter

California Native Plant Society

P. O. Box 381
Carmel Valley, CA 93924
Oct. 28, 2004

U.S. Fish and Wildlife Service
Field Supervisor, Ventura Office
2493 Portola Road, Suite B
Ventura, CA 93003

Gentlepeople:

The Monterey Bay Chapter of CNPS submits the following comments in response to the scoping announcement for the proposed Habitat Conservation Plan for the former Fort Ord military installation.

By way of background, we have been closely involved in the effort to protect the sensitive habitats and plants of Fort Ord since the late 60s, when the post commander was motivated by our chapter to set aside 10 reserves to protect specific plant resources. Later, these reserves received permanent protection as a result of mitigations required when the Army cleared a large area of sensitive maritime chaparral in order to construct new Ammunition Supply Points. Still later, these reserves were incorporated into the lands designated for transfer to the Bureau of Land Management for permanent protection as open space.

One of our concerns about the scoping process is how this new HCP relates to the Installation-Wide Multispecies HCPs of 1994 and 1997, the 1993 FEIS, the 1993 Biological Assessment, the 1993 USFWS Final Biological Opinion, the SFEIS of 1996, and the 1997 Amended Biological Opinion (ABO). The latter document states that "the Habitat Management Plan does not authorize incidental take . . . of any species listed as threatened or endangered under the Federal Endangered Species Act of 1973. Entities would submit the HCP in combination with additional documentation, including an implementation agreement signed by all parties receiving lands that are to be managed for wildlife values, to the USFWS to receive authorization for incidental take. . ." Does this mean that the new document will only deal with listed species and only with changes since those earlier dates? If so, we are very concerned about the other sensitive species (former Federal candidates, State-listed species, and CNPS IB species) that qualify for listing but have not made it through the cumbersome listing process. Also, does it mean that the previous documents will be incorporated by reference, so that commentors will need to use all of them in order to do a thorough analysis of the new HCP?

Later the ABO states that "some parcels (1) to be disposed of by the Army are intended to promote economic recovery after disposal and will be designated for development *with no restrictions or guidelines described in this HMP* (emphasis ours). Other parcels (2) will have development designated as the primary use, but recipients of disposed land *will be obligated to implement certain guidelines and/or preserve specific areas* through this HMP and deed covenants. Other parcels (3) are designated as habitat reserves or corridors and have *specific management guidelines and restrictions on development and uses.*" These quotes seem to refer to an additional document that will spell out the various levels of resource preservation. Is this the document that is currently being scoped?

We are particularly concerned about category (2), as we are seeing developments proposed that we find inadequately protect sensitive habitats and/or corridors. For example, we strongly opposed the huge 6000-car parking lot planned by SCRAMPA for the Laguna Seca racetrack because it would destroy dune gilia and other sensitive species when reasonable alternatives are available. The map implies that this is one of the areas with development restrictions, yet the proposal did not reflect this limitation. And at this point we have never been informed if or when or how a final decision was made. Another example is the proposed Blanco Road extension, which would impact a wildlife corridor and an important population of *Gilia tenuiflora* ssp. *arenaria* (sand gilia).



Dedicated to the preservation of California native flora



U.S. Fish and Wildlife Service

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Oct. 28, 2004

We supported proposals in the ABO and other documents for the use of controlled burns as part of the effort to eliminate unexploded ordinance, but because of community concerns about the impacts of smoke on public health, these have been severely limited, and in some cases replaced by heavy mowing equipment. We feel it is important for the relative merits of burning vs. mowing to be analyzed to make sure that important corridor areas do not become occupied by invasive non-native species as a result of mowing or that other adverse impacts occur.

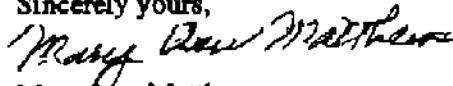
We strongly urge mitigations to require landscaping of category (1) and (2) areas with appropriate native plants. Because of the unique character of flora of Fort Ord as well as the need to conserve water, native plants from on-site stock should be used in exterior landscaping, and cultivars of manzanita and ceanothus that could hybridize with the rare natives must not be planted. Any annual wildflower plantings should be from seeds collected on site, not from commercial wildflower mixes. Bermuda, kikuyu, and Ehrharta or other non-native invasive grasses must not be used.

CNPS strongly supports accurate vegetation mapping and classification in preparing HCPs. The CNPS Vegetation Committee, made up of agency, academic, and consulting experts in the field of vegetation analysis, has been working for some years to develop methods of quantitatively identifying sensitive plant communities. It has produced *A Manual of California Vegetation* (now updated) and a simplified system of describing vegetation types that has proven very useful in the field. CNPS therefore recommends that responses to the following questions should be covered in HCPs:

1. Did the effort include a map of the vegetation/natural communities, and if not, why not?
2. Did the effort have a quantitatively based classification system (e.g. *A Manual of California Vegetation*/international classification) for defining natural communities?
3. Have local experts or state ecologists been consulted on the methodology for classifying and mapping the natural communities?
4. For target species involved in the plan, do the map and classification clearly define their critical habitats through such attributes as plant species composition and abundance, plant structure, and overall cover?
5. Is the classification and map hierarchical in nature so that target species with different habitat requirements (fine to coarse scale levels) can be modeled?
6. Has the plan recognized all the important vegetation/habitat types known in the area by local experts, state classifications, and/or additional surveys, and have the types been appropriately mapped?
7. Are there field vegetation data associated with the effort, and are they publicly available for examination?
8. Was the mapping methodology defined, and was the map accuracy assessed at a high level of confidence (around 80-90%)?
9. Can the mapping methodology be reproduced for re-mapping and monitoring efforts that cover the long-range viability of the plan?
10. Do the map and the classification include multiple attributes (such as percent vegetation cover, overstory height/structure, site quality information/degree of disturbance), which will be useful for long-term habitat quality ranking, monitoring, and modeling?

Responses to these questions will help determine how credible an HCP will be in assuring the long-term survival of sensitive plant communities. We appreciate the opportunity to participate in HCP scoring and ask to be kept informed at each step in this process.

Sincerely yours,



Mary Ann Matthews
Conservation Chair

California Native Plant Society

October 29, 2004

US Fish and Wildlife Service
 Attention: Diane Steeck
 Fax: (805) 644-3958
 RE: Scoping Period for a HCP at Ft. Ord

Dear Ms. Steeck,

I am commenting on behalf of the Santa Cruz County Chapter of the California Native Plant Society (CNPS). It appears that the purpose of this scoping period is to comment on a HCP for Ft. Ord. As I have been unable to find such a document the question arises whether I have just been unable to locate it or that it does not exist yet. Can you answer that question?

Regardless of the above missing HCP, I do have comments from the perspective of CNPS, an organization dedicated to the preservation of California flora, as well as a past volunteer assisting BLM and the UC Reserve System with mapping of listed species at Ft. Ord. Following are some areas of concerns and issues that the HCP needs to consider.

#1 These reserves are huge and contain many CNPS listed species in substantial numbers. Thus to accurately portray and protect such reserves should not all CNPS listed species be included in any environmental document and analyses?

#2 Having first hand experience on the UC's North Reserve and in light of its key connectivity between the coast and inland habitat would not any kind of damage or fragmentation be an unacceptable and unmitigatable impact?

#3 Any vegetation management program (VMP) needs to develop best management practices (BMP) that enhance habitat and change with new science. How will this document make such decisions?

#4 Any use of "native plant" landscaping runs the risk of genetically degrading the unique local native species. How will this be prevented?

#5 The potential for massive invasive plant problems resulting from the 10,000 acres of development is catastrophic. How will this problem be controlled including funding for such a labor intensive issue?

In conclusion, the great potential for conflict of interest between 10,000 acres of development and 18,000 acres of reserves is undeniable. With such potential for major impacts to all the reserves sensitive species would not an EIS be the best kind of environmental analysis?

Sincerely,



Vince Cheap, Conservation Chair
 CNPS Santa Cruz County
 4160 Jade St. #112
 Capitola, CA 95010



Dedicated to the preservation of California native flora



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

October 29, 2004

Diane Noda
U.S. Department of the Interior
Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003

Re: Scoping for the Former Fort Ord Habitat Conservation Plan, National Environmental Policy Act Compliance, PAS 202.2009.2633

Dear Ms. Noda:

In your October 12, 2004 letter to EPA, the Service requested EPA lend its expertise with regard to air impacts associated with prescribed burns at the former Fort Ord. As you know, the former Fort Ord is an installation listed on the National Priorities List and is therefore undergoing cleanup under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The Army has used prescribed burns to clear vegetation in support of unexploded ordnance (UXO) cleanup actions. In EPA's oversight capacity, we required that the Army consider alternatives to prescribed burns, as well as evaluate impacts associated with smoke from the burns.

In a feasibility study in support of the CERCLA *Record of Decision for Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A, and Site OE-16 (ROD)*, dated September 20, 2002, the Army evaluated a number of vegetation clearance alternatives, including mechanical and manual cutting, animal grazing (e.g., goats), herbicide application, and prescribed burns. While all were somewhat effective in removing vegetation, burns were identified as the safest method for workers and the most compatible with habitat management objectives identified in the Army's 1997 Habitat Management Plan. However, because burns create smoke and the public had expressed concern over the continued burns, the Army, in consultation with the EPA, CA Department of Toxic Substances Control, CA Air Resources Board, and the Monterey Unified Air Pollution Control District, conducted a study to determine if the emissions from a prescribed burn in an area with the highest concentrations of UXO (i.e. Ranges 43-48) would be significantly different than a prescribed burn or wildfire on comparable land. The study concluded that the quantity of pollutants put into the air from incidental detonation of UXO during a burn were so small in comparison to the emissions from the smoke alone that they were insignificant and well below health protective screening levels. The agencies, however, acknowledged that smoke from the vegetation itself could still impact sensitive populations, so agreed the burns needed to be carefully managed. The Army and regulatory team developed a set of meteorological conditions under which the burn should occur, and designed a comprehensive air monitoring program to measure emissions during the planned burn.

As you know, on October 24, 2003, the Army initiated a prescribed burn in Ranges 43-48 to clear approximately 500 acres of predominantly maritime chaparral in support of UXO cleanup actions. The burn did not progress as planned, escaping initial boundaries and ultimately burning nearly 1500 acres while inundating the Monterey Peninsula with smoke. The Army and agencies initiated a series of after-action reports to evaluate various aspects of the burn, including air monitoring results and the cause of the escape. The air monitoring data was consistent with previous study results, showing that any UXO-related compounds detected were within health-protective levels. It was no surprise that the smoke associated with the burning of vegetation itself, however, contained high levels of particulate matter and certain irritants in smoke (e.g., acrolein), causing discomfort to many residents. EPA believes the larger than planned burn, coupled with the fact that management of the fire quickly turned from controlled ignition to fire suppression, produced large amounts of smoke. Key findings of the after-action report as well as consultation with fire agencies were that the size of future burns should be reduced to around 100 acres or less and site preparation should be enhanced. Thus, EPA believes that if the Army conducts smaller burns under prescribed meteorological conditions with enhanced site preparation, the burns will be easier to manage, will allow for better smoke dispersal, and should result in no significant impacts.

Key documents referenced above can be found on the Army's website, <http://www.fortordcleanup.com>, as follows:

- *Final Interim Action OE Remedial Investigation/Feasibility Study For Ranges 43-48, Range 30A, Site OE-16, Former Fort Ord, CA (March 7, 2002):*
http://www.fortordcleanup.com/ar_pdfs/AR-OE-0332JJ/
- *Record of Decision for Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A, and Site OE-16, Former Fort Ord, CA (September 20, 2002):*
http://www.fortordcleanup.com/ar_pdfs/AR-OE-0414/
- *Draft Final Ranges 43-48 Prescribed Burn Air Monitoring Report, Former Fort Ord, CA (June 16, 2004):* http://fortordcleanup.com/ar_pdfs/AR-OE-0481J/
- *Draft Final Summary After-Action Report: Ranges 43-48 Prescribed Burn, Former Fort Ord, CA (June 24, 2004):*
http://fortordcleanup.com/ar_pdfs/AR-OE-0484Q/OE-0484Q_complete-report.pdf

If EPA can be of further assistance, please do not hesitate to contact me at 415-972-3005.

Sincerely,



John D. Chesnutt
Chief, DoD and Pacific Islands Section
Superfund Federal Facility and Site Cleanup Branch

John Chesnutt
Fort Ord Remedial Project Manager
Environmental Protection Agency
75 Hawthorne, SFD-8-3
San Francisco, CA 94105
(415) 972-3005

Subject: Scoping Period for the Former Fort Ord Habitat Conservation Plan NEPA
Compliance

Dear Mr. Chesnutt:

Enclosed is a copy of the Service's notice of intent (NOI) to prepare an environmental document related to the former Fort Ord Habitat Conservation Plan (HCP). As indicated in the notice, the Service is evaluating whether to prepare an environmental assessment (EA) or Environmental Impact Statement (EIS) as we comply with the National Environmental Policy Act (NEPA). We are also gathering information to determine the significant issues to be addressed and alternatives to be considered in the NEPA document. The federal action we are considering taking that requires NEPA compliance is issuance of a permit allowing incidental "take" (e.g. to harm, harass, kill) of listed species that would occur during reuse of former Fort Ord. The HCP is the document that defines the actions that will be taken to minimize and mitigate the expected impacts of the "taking" on listed species.

The draft HCP under development is based on the Army's 1997 Habitat Management Plan. It will address impacts to federally listed and rare species and their habitats that may occur due to reuse activities. Reuse activities include commercial, residential, and recreational development, as well as actions related to habitat management, such as prescribed burning, restoration, and weed control. To maintain diverse, high quality habitat for threatened and endangered species and to address the potential wildfire issues on the wildland-urban interface, the draft HCP, like the HMP, will include prescribed burning within the thousands of acres of maritime chaparral that would be in habitat reserves on former Fort Ord.

Many of the activities associated with the reuse of former Fort Ord were already evaluated under NEPA and the California Environmental Quality Act by the Army and FORA, respectively, during the mid-1990s. We intend to incorporate by reference sections of those documents where relevant. We are contacting your agency due to your air quality expertise and involvement in other issues at former Fort Ord. We invite your comments on the scope and level of the NEPA analysis, issues we should address, alternatives we might consider, or specific documents that may be relevant to our analysis. The formal comment period closes October 29, 2004.

If you have any questions, please contact Diane Steeck of my staff at (805) 644-1766.

Sincerely,

Grey Hayes, PhD
240 Hames Road
Corralitos, CA 95076
831-728-8050
coastalprairie@aol.com

Diane Steeck
USFWS
via email: Diane_Steeck@r1.fws.gov

Dear Ms. Steeck,

The following are my comments for the scoping of the NEPA document covering the proposed HCP for Ft. Ord. I very much hope that whoever prepares that document has the scientific credentials and expertise in maritime chaparral to effectively execute such an important conservation endeavor. I would be pleased to help network any additional expertise that may be needed.

Thank You,

Grey Hayes

On the question of an EA vs. an EIS

The proposed developments and management options are so large in scope with so many uncertainties, that there should be little doubt that there will be significant impacts to the sensitive species and habitats at Ft. Ord. This would then require an EIS rather than an EA. If there is sufficient uncertainty about the need to prepare an EIS, then a Draft EIS should be circulated along with the HCP: if, with this further analysis, there are found to be no significant impacts, then a finding of no significant impacts could be published at a later date with little additional environmental review.

Scope of the environmental documents

The following is a list of my concerns about the scope of a potential HCP

- Consideration of impacts to the UC Natural Reserve System's South Reserve by the proposed transportation corridor project. The South Reserve was envisioned as an important wildlife corridor which would be affected by this proposal. There are extensive areas of sand gilia in the proposed alignments. Since the area was already proposed to be set aside for these and other reasons, how is it possible to mitigate for these actions when there is no other comparable habitat to set aside that can serve these goals?
- Analysis of the use of an adaptive management versus a prescription approach to the vegetation management program (prescribed fire, mechanical clearing). There is much uncertainty about the appropriate interval between major vegetation disturbances and rigid approaches may be deleterious without being informed by data. How will the environmental review and HCP define 'adaptive management' and weigh the impacts of ignoring or using its principles? How will the diverse land managers inform one another and themselves in the long run to better manage Ft. Ord's fire-dependent habitats? Because there is an as-yet undocumented complex history of fire and other vegetation disturbances at Ft. Ord, what analyses will be used to inform and improve future land management decisions? Is it not negligent to proceed to analyze HCP impacts without including analyses of the very much existing data that has yet to be analyzed (fire history, stand composition, mechanical clearing effects)? How flexible will the vegetation management program be in the future? Who will make decisions on changing any recommendations or requirements of the HCP/EIS?
- Analysis of the impacts of increased urban development on the potential for prescribed fire management and restoration of the fire-adapted ecosystems at Ft. Ord. With increasing development, how will the risk of property damage affect the chance of prescribed fire? What are the consequences of the absence of prescribed fire to Ft. Ord's sensitive species? How will these consequences be mitigated?

- Cumulative impacts analysis. CEQA, at least, requires a cumulative impacts analysis. With each new development on the edge of the natural habitats at Ft. Ord, there will be a non-linear increase in the amount of edge related impacts. In particular, this edge makes it increasingly difficult to manage prescribed burns. How will the cumulative impacts analyses be accomplished at the various levels of environmental review for the HCP?
- Analysis of the increased invasion of Argentine ants. Research suggests that the Argentine ant is increasingly invading Ft. Ord, displacing native ants and negatively impacting sensitive wildlife species. How will proposed impacts at the base affect this invasion? What will be done to monitor and mitigate these impacts?
- The use of 'native plants' has been strongly considered throughout the Ft. Ord base. How will the planting only of ecologically/genetically appropriate species be enforced? Will there be an independent, base-wide biological monitoring staff? Considering the documented potential loss of *Arctostaphylos pallida* through genetic contamination, how will similar species loss be prevented at Ft. Ord?
- Because the entire base will be planned to be either conserved or developed in one plan, how will future impacts to sensitive species be mitigated if there are no other lands which can be set aside with mitigation money? In other words, there will inevitably be damage that will not be fully mitigatable in set aside areas. Will there be parcels defined as potential areas for a mitigation bank?
- There is no certainty that invasive plant species control will be sustained. Existing habitat conservation areas which are proposed as mitigation for developing other areas may thereby decline in value. How will management of conservation areas be funded to sustain their use as mitigation for developed areas? What specific threshold and mechanism will be used to trigger additional management of conservation areas should they decline in value for sensitive species? What recourse will there be if significant natural conservation areas (designed to mitigate for development) are invaded?
- How will fire control practices for wildland fire be determined to best conserve sensitive species? What guidelines will be issued for revegetation after catastrophic wildfires?
- Recently, an unidentified kangaroo rat was caught from the Ft. Ord area. Will additional surveys be performed for this sensitive species prior to issuance of the HCP? How will feral and roaming house cats be controlled from impacting this and other sensitive species?
- Funding is perhaps the largest issue. The success of the HCP depends upon a long-term reliable funding mechanism. Much of the key work to create a

successful in the Ft. Ord area has the potential to be quite expensive. For instance, prescribed fire becomes increasingly expensive with increasing development. The monitoring and data management activities that are necessary to ensure the success of an adaptive management regime are also expensive. Fortunately, there is some level of experience with prescribed fire, erosion, and exotic species control at Ft. Ord with which one could base at least conservative predictions about future costs of habitat management. Will these costs at least be made public and the difference between the costs and the anticipated revenue be made clear? What mechanisms do the regulatory agencies have at this and future junctures to ensure the success of the HCP in the face of funding shortfalls? Specifically, can the fees for the future developments be higher than present development fees? Will any of the various municipalities be forced to guarantee success with bonds? Is it possible to create a regional tax structure that will be based on the success of the HCP? Who will oversee monitoring of the success of the HCP?

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Steve Endsley
Dir. of Planning
FORA

Jen Lechuga
Habitat Conservation Plan Coordinator
U.S. Fish And Wildlife Service
Ventura, California 93003

Friday, October 29, 2004

Scoping for Fort Ord Habitat Conservation Plan & EIS

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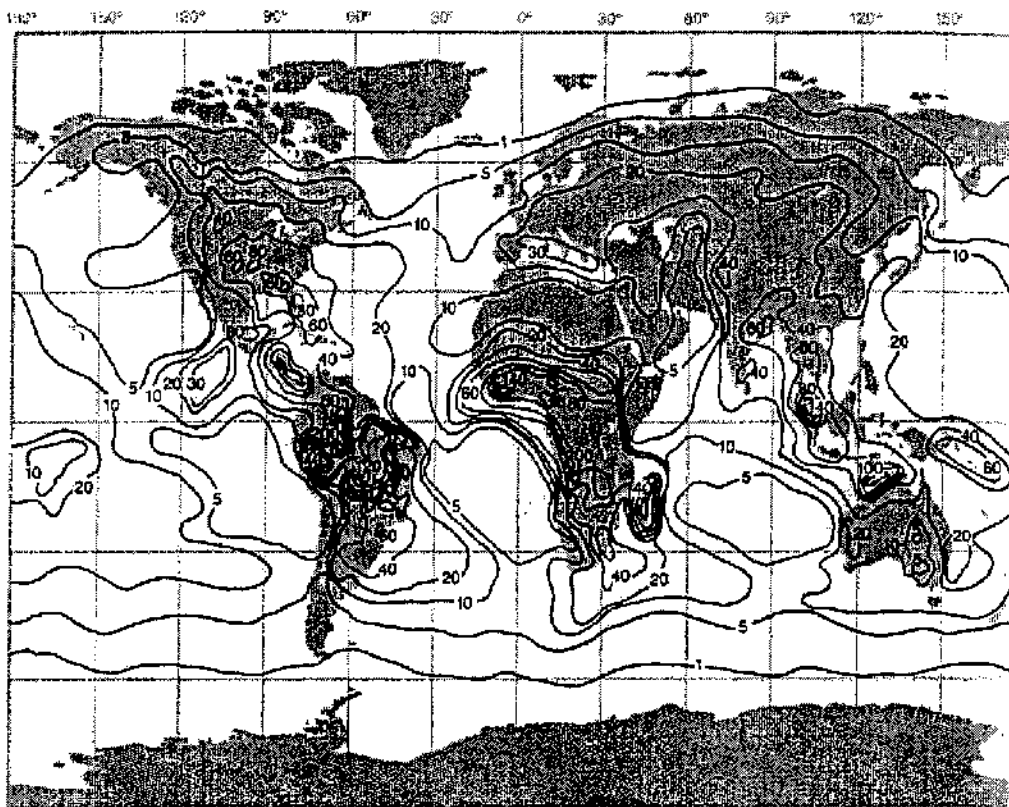
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Within Monterey County, lightning frequency is highest in the 5,000 ft Big Sur mountains, and decreases steadily and rapidly as the terrain descends to sea level. Keeley's USFS study of 100,000 fires in California in the 1970's under USFS jurisdiction found **less than one percent of lightning caused fires occurred below 250 meters (800 feet) in elevation.** This must be tempered by the fact that Forest Service has relatively little land at or near sea level.

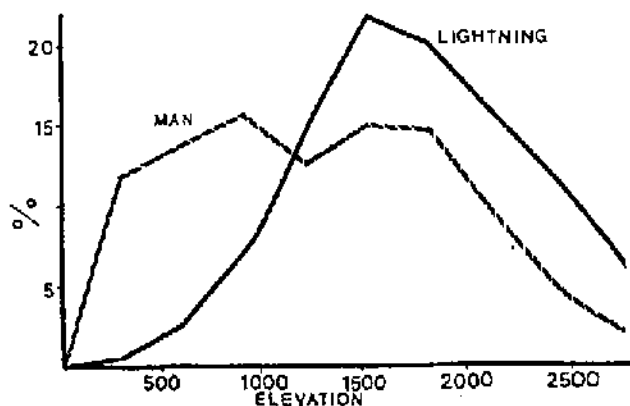


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For Ord in Big Sur Rainshadow (Lightning-shadow)

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Lowest Lightning Frequency Area in County with US's Lowest Lightning Frequency

So we start out with the entire county having an exceptionally low lightning frequency, then find Fort Ord on the coast, near sea level, in the rain (lightning) shadow of the Big Sur mountains. This leaves Fort Ord as an area with perhaps below if lightning frequency in Monterey County, in a County with among below if lightning frequency in the US.

Is Lightning Rarity Enough To Support Natural Fires?

Even if this area has the lowest lightning strike frequency in the country, that could be refuted if that lightning caused fire rate is high enough. The question then is - is a lightning flash (not the far rarer lightning caused fire) rate of 1 per 390 square kilometers per year enough to make Fort Ord's habitat dependent on fires?

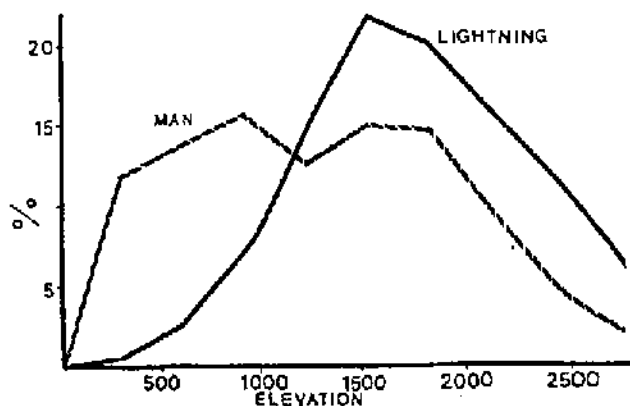


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This also puts Fort Ord in an area of the lowest lightning fire recurrence in all of California even when combining it with the Big Sur mountains and the inland dry areas of San Benito County.

Table 7--Calculated recurrence interval for lightning-caused wildfires alone and all wildfires on CDF land. Recurrence interval in years = total area/average area burned per year.

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7. San Mateo-Santa Cruz	170,909	167
8. Santa Clara	772	45
9. Sonoma	79,184	63
10. Lake-Napa	19,541	51
11. Mendocino	15,163	239
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U.S. Fish And Wildlife Service botanist Diane Steeck is a Fort Ord burning proponent. In her arguments she wrongly assumes the burden is on the public to refute the claim of natural frequent burning, which is at best a theory, or far more likely merely a hypothesis, mere speculation, without any direct evidence.

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When an activity, or project, has such overwhelmingly deadly and destructive environmental impacts, as fires and burning do, the burden is clearly on those who advocate such destructive actions - to provide complete direct evidence of any speculated benefits. There is no direct evidence at all, let alone evidence to complete a rational argument. Further, even the indirect evidence is weak to poor.

Lifespan Shorter than Fire Frequency

What prescribed burning advocates failed to recognize is that southern Monterey Bay coastlands do not have enough lightning to cause fires at a frequency less than the lifespans of the imperiled species themselves.

Monterey Pine Was Recently Wrongly Considered Fire-Dependent

There are virtually no records of lightning caused or aboriginal caused fires in the Fort Ord area. Thus when lightning caused fire occurs no more often in any specific area than 500 years, we need to sit back and rethink conclusions on whether plants are truly fire dependent, just as Monterey Pine experts have had to do in the past decade.

HOPE is strongly interested in protecting native ecosystems in their genuine natural state. You can count on us to help you oppose any plan which relies on speculative hypotheses and theories which kill imperiled animals and plants.

We respectfully insist that Fish and Wildlife Service use the best available science to protect those species and ecosystems from intentional deadly and destructive environmental impacts of fires and burning.

With our best wishes,

David Dilworth, Executive Director

Cc: US FWS
Congressman Sam Farr
Assemblyman John Laird
Fort Ord Community Advisory Group

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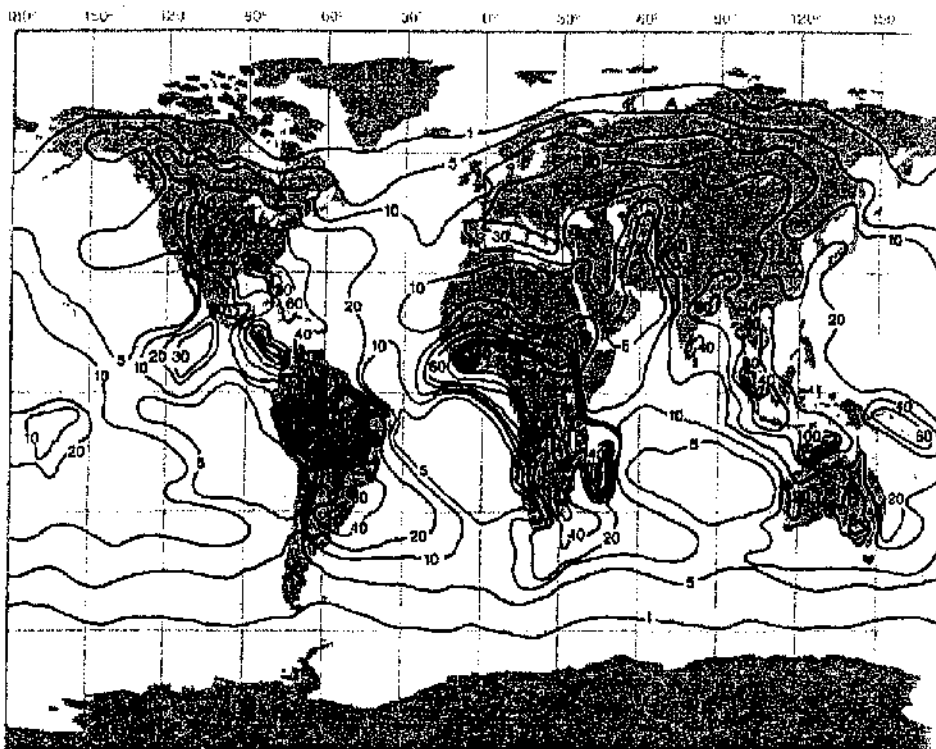
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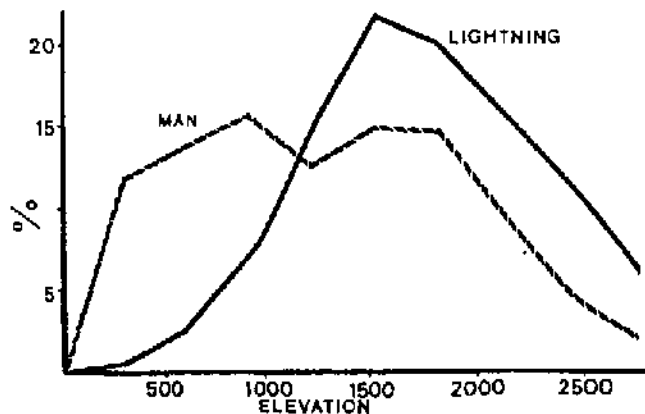


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When an activity, or project, has such overwhelmingly deadly and destructive environmental impacts, as fires and burning do, the burden is clearly on those who advocate such destructive actions - to provide complete direct evidence of any speculated benefits. There is no direct evidence at all, let alone evidence to complete a rational argument. Further, even the indirect evidence is weak to poor.

Lifespan Shorter than Fire Frequency

What prescribed burning advocates failed to recognize is that southern Monterey Bay coastlands do not have enough lightning to cause fires at a frequency less than the lifespans of the imperiled species themselves. Other than Oaks, the longest lifespan of an imperiled Fort Ord native plant is on the order of 10 years - not 100 or a thousand.

Monterey Pine Was Recently Wrongly Considered Fire-Dependent

There are virtually no records of lightning caused or aboriginal caused fires in the Fort Ord area. ~~This w~~When lightning caused fire occurs no more often in any specific area than 500 years, we need to sit back and rethink conclusions on whether some plants are truly fire dependent, just as Monterey Pine experts have had to retract the myth of Monterey pines' fire-dependence ~~do~~ in the past decade.

HOPE is strongly interested in protecting native ecosystems in their genuine natural state. You can count on us to help you oppose any plan which relies on speculative hypotheses and theories which kill imperiled animals and plants.

We respectfully insist that Fish and Wildlife Service use the best available science to protect those species and ecosystems from intentional deadly and destructive environmental impacts of fires and burning.

With our best wishes,

David Dilworth, Executive Director

Cc: US FWS
Congressman Sam Farr
Assemblyman John Laird
Fort Ord Community Advisory Group



MONTEREY BAY

Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

FISH AND WILDLIFE
SERVICE

OCT 18 2004

RECEIVED
VENTURA, CA

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

October 12, 2004

Diane Steeck
U.S. Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003

SUBJECT: NOI TO PREPARE AN ENVIRONMENTAL DOCUMENT FOR FORT ORD
HMP

Dear Ms. Steeck:

Staff has reviewed the referenced document and has recommendations for the scope of work for the air quality analysis. Since the proposed project includes burning 500-800 acres annually, the following air quality impacts should be addressed:

1. VOC, NO_x, PM₁₀ and toxic emissions from each prescribed burn should be quantified.
2. If the ozone precursor emissions would cause or contribute to a violation of ozone standards for even one day, the project would have a significant impact on air quality. See the District's Rules and Regulations and FEIR on the Smoke Management Plan regarding procedures for determining significance.
3. If PM₁₀ or toxic air contaminants would exceed applicable standards, the project would have a significant impact on air quality. See the District's Rules and Regulations and FEIR on the Smoke Management Plan regarding procedures for determining significance.
4. The project description should also include the possibility of escaped fires and an evaluation of their impacts on surrounding communities. Mitigation measures should include decision making resources for avoiding adverse smoke impacts as well as development of adequate fuel breaks.

Please do not hesitate to call if you have any questions.

Sincerely,

Janet Brennan
Supervising Planner
Planning and Air Monitoring Division

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King City

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Santa Cruz
County

Grey Hayes, PhD
240 Hames Road
Corralitos, CA 95076
831-728-8050
coastalprairie@aol.com

Diane Steeck
USFWS
via email: Diane_Steeck@r1.fws.gov

Dear Ms. Steeck,

The following are my comments for the scoping of the NEPA document covering the proposed HCP for Ft. Ord. I very much hope that whoever prepares that document has the scientific credentials and expertise in maritime chaparral to effectively execute such an important conservation endeavor. I would be pleased to help network any additional expertise that may be needed.

Thank You,

Grey Hayes

On the question of an EA vs. an EIS

The proposed developments and management options are so large in scope with so many uncertainties, that there should be little doubt that there will be significant impacts to the sensitive species and habitats at Ft. Ord. This would then require an EIS rather than an EA. If there is sufficient uncertainty about the need to prepare an EIS, then a Draft EIS should be circulated along with the HCP: if, with this further analysis, there are found to be no significant impacts, then a finding of no significant impacts could be published at a later date with little additional environmental review.

Scope of the environmental documents

The following is a list of my concerns about the scope of a potential HCP

- Consideration of impacts to the UC Natural Reserve System's South Reserve by the proposed transportation corridor project. The South Reserve was envisioned as an important wildlife corridor which would be affected by this proposal. There are extensive areas of sand gilia in the proposed alignments. Since the area was already proposed to be set aside for these and other reasons, how is it possible to mitigate for these actions when there is no other comparable habitat to set aside that can serve these goals?
- Analysis of the use of an adaptive management versus a prescription approach to the vegetation management program (prescribed fire, mechanical clearing). There is much uncertainty about the appropriate interval between major vegetation disturbances and rigid approaches may be deleterious without being informed by data. How will the environmental review and HCP define 'adaptive management' and weigh the impacts of ignoring or using its principles? How will the diverse land managers inform one another and themselves in the long run to better manage Ft. Ord's fire-dependent habitats? Because there is an as-yet undocumented complex history of fire and other vegetation disturbances at Ft. Ord, what analyses will be used to inform and improve future land management decisions? Is it not negligent to proceed to analyze HCP impacts without including analyses of the very much existing data that has yet to be analyzed (fire history, stand composition, mechanical clearing effects)? How flexible will the vegetation management program be in the future? Who will make decisions on changing any recommendations or requirements of the HCP/EIS?
- Analysis of the impacts of increased urban development on the potential for prescribed fire management and restoration of the fire-adapted ecosystems at Ft. Ord. With increasing development, how will the risk of property damage affect the chance of prescribed fire? What are the consequences of the absence of prescribed fire to Ft. Ord's sensitive species? How will these consequences be mitigated?

- Cumulative impacts analysis. CEQA, at least, requires a cumulative impacts analysis. With each new development on the edge of the natural habitats at Ft. Ord, there will be a non-linear increase in the amount of edge related impacts. In particular, this edge makes it increasingly difficult to manage prescribed burns. How will the cumulative impacts analyses be accomplished at the various levels of environmental review for the HCP?
- Analysis of the increased invasion of Argentine ants. Research suggests that the Argentine ant is increasingly invading Ft. Ord, displacing native ants and negatively impacting sensitive wildlife species. How will proposed impacts at the base affect this invasion? What will be done to monitor and mitigate these impacts?
- The use of 'native plants' has been strongly considered throughout the Ft. Ord base. How will the planting only of ecologically/genetically appropriate species be enforced? Will there be an independent, base-wide biological monitoring staff? Considering the documented potential loss of *Arctostaphylos pallida* through genetic contamination, how will similar species loss be prevented at Ft. Ord?
- Because the entire base will be planned to be either conserved or developed in one plan, how will future impacts to sensitive species be mitigated if there are no other lands which can be set aside with mitigation money? In other words, there will inevitably be damage that will not be fully mitigatable in set aside areas. Will there be parcels defined as potential areas for a mitigation bank?
- There is no certainty that invasive plant species control will be sustained. Existing habitat conservation areas which are proposed as mitigation for developing other areas may thereby decline in value. How will management of conservation areas be funded to sustain their use as mitigation for developed areas? What specific threshold and mechanism will be used to trigger additional management of conservation areas should they decline in value for sensitive species? What recourse will there be if significant natural conservation areas (designed to mitigate for development) are invaded?
- How will fire control practices for wildland fire be determined to best conserve sensitive species? What guidelines will be issued for revegetation after catastrophic wildfires?
- Recently, an unidentified kangaroo rat was caught from the Ft. Ord area. Will additional surveys be performed for this sensitive species prior to issuance of the HCP? How will feral and roaming house cats be controlled from impacting this and other sensitive species?
- Funding is perhaps the largest issue. The success of the HCP depends upon a long-term reliable funding mechanism. Much of the key work to create a

successful in the Ft. Ord area has the potential to be quite expensive. For instance, prescribed fire becomes increasingly expensive with increasing development. The monitoring and data management activities that are necessary to ensure the success of an adaptive management regime are also expensive. Fortunately, there is some level of experience with prescribed fire, erosion, and exotic species control at Ft. Ord with which one could base at least conservative predictions about future costs of habitat management. Will these costs at least be made public and the difference between the costs and the anticipated revenue be made clear? What mechanisms do the regulatory agencies have at this and future junctures to ensure the success of the HCP in the face of funding shortfalls? Specifically, can the fees for the future developments be higher than present development fees? Will any of the various municipalities be forced to guarantee success with bonds? Is it possible to create a regional tax structure that will be based on the success of the HCP? Who will oversee monitoring of the success of the HCP?

S.O.A.R.

Save Our Air Resources * * * * *

751 Monterey Salinas Hwy, Salinas, Ca. 93908-8953 (831) 484-2834 phone & fax

LIFE 2000 Christine Bettencourt (831) 674-1773
P.O. Box 1852 GREENFIELD, CA. 93927

**DFWS ~
Diane Noda
Field Supervisor**

OCT. 28, 2004

By FAX

ATTN: DIANE NODA
MIKE FRISK

US F&W'S / DEPT of Interior

DEAR MS. NODA and MR. FRISK,
WE FORMALLY REQUEST A 30 DAY EXTENSION
OF THE PUBLIC COMMENT PERIOD ON THE HABITAT
CONSERVATION PLAN REGARDING ENDANGERED SPECIES
ON THE FORMER FORT ORD ARMY POST IN MONTEREY
COUNTY, CA.

WE WOULD ASK IT TO ALSO BE PROPERLY
ADVERTISED AND ADEQUATE PUBLIC NOTICE GIVEN
TO ALLOW SUBMISSION OF COMMENTS, BY
and FROM THE PUBLIC.

Sincerely,
Christine Bettencourt, Director LIFE 2000
and
LINDA MILLERICK, Director S.O.A.R. /
SAVE OUR AIR RESOURCES
by Linda G. Millerick 28 October 2004

402.2009.2770.6108

27 Oct 09

Re: Habitat Conservation Plan at the
Fort Ord Military Installation

Please send me a copy of the US Army
Habitat Management Plan for Fort Ord.
When available please send me a copy
of the HCP EA/EIS.

Thank you.

Matthew Spies

C.G. Spies
P.O. Box 154
Ocean Beach, NY 11770-0154



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Hollister Resource Area
20 Hamilton Court
Hollister, California 95023-2535

MH
JSC

April 12, 2005



CA-190.50
1600

Mike Houlemard
Executive Officer of Fort Ord Reuse Authority (FORA)
100 12th Street, Building 2880
Marina, CA 93933

The Bureau of Land Management (BLM) appreciates the collective effort that has gone into the preparation of the September 2004 Draft of the Fort Ord Habitat Conservation Plan (HCP). The document represents several years of coordination between the Fort Ord Reuse Authority and the primary habitat managers located on the former Fort Ord, as well as the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDF&G). As you know, the HCP does not, in of itself, facilitate any Section 7 compliance that BLM is obligated to undertake for lands under its jurisdiction at the former Fort Ord. Endangered Species Act (ESA) compliance by the BLM will likely be facilitated through a separate document, such as our ongoing plan amendment to our Hollister Field Office's Resource Management Plan, and completion of our current interim Section 7 Consultation process. We have assisted the community with this HCP planning effort because we are interested in facilitating the reuse process for the former Fort Ord, and ensuring that the natural environment is given proper consideration.

Our review of the Draft HCP has yielded the attached comments that have been prompted, in part, by requirements of the USFWS and CDF&G to facilitate state and Federal ESA compliance for non-Federal land recipients. Most of our comments, or portions thereof, have been the result of years of coordination through the Fort Ord Coordinated Resources Management Planning group (Fort Ord CRMP) at the former Fort Ord. Your agency's leadership with this group and the coordinated planning effort has been greatly appreciated. Most of the attached comments have already been coordinated with the members of the Fort Ord CRMP and should logically find a place into the revised/final HCP.

One of the primary strengths of the HCP comments that we provide is that they better describe our agency's habitat management and enhancement responsibilities such that the USFWS and CDF&G can proceed with state and Federal ESA processes. Because

5

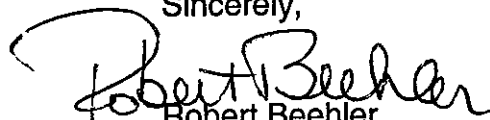
the BLM lands at the former Fort Ord are being used as part of the overall habitat mitigation strategy that contain provisions for "take", those regulatory agencies have required more specificity on what our agency obligations would be.

In short, our habitat enhancement requirements are compensating for "take" above and beyond those of our own actions and management practices. This has led to some management requirements of our agency that are normally considered above and beyond our typical management programs. Your agency has been very understanding of this dilemma and has supported strategies that relieve the BLM of some rather costly responsibilities such as biological monitoring.

What is lacking in this comment letter is our agency's response to the issue of funding assurances. In the weeks to come, we will be completing a table that specifies: 1) what our HCP obligations will be; 2) what the estimated costs of those obligations are; and 3) how those obligations will be achieved. We will need to coordinate our cost estimates with those that you are having developed by the Center for Natural Lands Management for non-Federal land recipients – and we encourage your further consideration of cooperative arrangements for obligations that are common to multiple parties within the HCP.

Should you have any questions regarding these comments, feel free to contact me or my Fort Ord Project Manager, Eric Morgan, at (831)394-8314.

Sincerely,


Robert Beehler
Hollister Field Manager

Cc: Mike Zander, Zander Associates
Fort Ord CRMP, HCP Working Group

Enclosure: September 2004, Draft HCP Comments (10 pages)

4.1.2 Ecosystem Process Management

Maritime Chaparral

The BLM recommends language replacing the OBJECTIVES and management actions for Maritime Chaparral with:

OBJECTIVE: Maintain (at minimum) the viability and populations of species and their habitats covered within the HCP using (as one standard) those habitat areas documented during adjusted baseline surveys completed within 3 to 5 years of land transfer, or 3 to 5 years following approval of the HCP. Over the 50-year life of this HCP, populations of individual HCP plant species are expected to fluctuate through normal succession such that early seral-stage species will become less evident as maritime chaparral stands age. Similarly, early seral-stage species will become more evident after older maritime chaparral stands burn. The HCP recognizes that protecting the seed banks within the soil of early seral-stage species is an important component of managing older stands of maritime chaparral.

Healthy maritime chaparral occurs as a patchwork of stands that support vegetation of various ages and structures. This habitat 'mosaic' allows for high species and habitat diversity and provides sources of propagules for dispersal between patches. For purposes of this HCP, the long-term desired future condition of maritime chaparral habitat will contain a mixture of age classes and species that tend to carry lower fuel loadings at the habitat area/development parcel margins, and higher fuel loadings away from those margins. After 50 years, the desired future age-class distribution of maritime chaparral would have about 30% less than 20 years of age, 30% between 20 to 45 years of age, 30% between 45 to 70 years of age, and 10% greater than 70 years of age. These percentages may be adjusted based on the results of studies of maritime chaparral and recovery.

Control the spread, and reduce the amount of current noxious weed infestations, such that the overall area of individual infestations does not exceed 5% of the total area of the habitat. Infestations would be mapped in concert with baseline habitat surveys to determine whether abatement actions were contributing to the fulfillment of noxious weed control goals.

Reduce accelerated erosion caused by human use and intrusion, and restore those areas into healthy maritime chaparral where possible. While wind, sheet, rill and gully erosion are natural processes in the maritime chaparral landscape; accelerated erosion is normally associated with road construction and maintenance (or lack of maintenance) and former military training of the Conserved Habitat Areas. Restoration should recreate, upon a disturbed landscape, the abiotic and biotic characteristics and processes that produce equilibrium landforms bearing the highest quality habitat given the constraints of the region. The models for specific restoration sites are suitable reference sites selected from natural, functioning, undisturbed parts of the nearby landscape. The resulting restoration project should be indistinguishable from the surrounding terrain, given enough time to evolve toward the biotic and abiotic reference site.

SPECIFIC ACTIONS

- BLM ACTION 1 - While site-specific restoration and erosion control sites are difficult to delineate at this time within the multiple range area where most of the maritime chaparral occurs, it is reasonable to expect that the BLM will restore and stabilize up to 100 miles of former roads and/or associated gullies and unneeded hardstand areas over the life of the HCP. This will result in the restoration of between 100 to 150 acres of maritime chaparral habitat. This estimate is based upon aerial surveys of the route network conducted within the *Road and Trail Resources Inventory (RATRI): Bureau of Land Management Lands, Former Fort Ord, Monterey County, California (2002)* and consideration of the *Watershed Riparian Assessment Report (2002)*. This erosion control, hardstand removal and habitat restoration estimate excludes the Army's restoration requirements associated with the munitions and explosives of concern (MEC) cleanup program, and includes restoration that has already been conducted by the BLM since land transfer of 7,200 acres in 1996.
- BLM ACTION 2 – Over the life of this HCP, the BLM will reshape, stabilize and restore between 1 to 15 acres of degraded or destroyed maritime chaparral habitat each year associated with roads, gullies, or rills into naturally recurring maritime chaparral/coastal scrub habitat.
- BLM ACTION 3 - The BLM will plant native plant seedlings, and/or broadcast native seed on restoration sites where appropriate to expedite the recovery of native vegetation. Species selected for planting or broadcasting would mimic the closest adjoining habitat that was considered a reference site of healthy maritime chaparral.
- BLM ACTION 4 - The BLM will utilize prescribed burning on a rotational basis, and wildfire suppression strategies to fulfill vegetation and fuels management objectives. The specific seasonal timing, patch size, decadal total, and rotational time of prescribed burns will be determined based on the results of studies of maritime chaparral and recovery. Assuming that there are about 9,000 acres of maritime chaparral within the NRMA, the BLM will evaluate burn events (i.e. prescribed fires and wildfire) to determine whether the desired future age-class distributions and species compositions are being attained. About 1,000 to 1,500 acres of maritime chaparral will need to be burned each decade to replicate desired future conditions. Should decadal burn targets/estimates be exceeded, the BLM will adjust suppression and enforcement strategies to reduce the size and/or number of wildfires. Should decadal burn targets/estimates not be met, the BLM will increase the number and/or size of prescribed fires.
- BLM ACTION 5- The BLM will continue to coordinate with the Army on vegetation removal strategies as part of the MEC cleanup program within the

NRMA. The BLM will not perform prescribed burns for habitat enhancement purposes on sites that have surface MEC. The BLM will, however, support the consideration of prescribed fire on these sites by the Army as part of the MEC cleanup process under CERCLA.

- BLM ACTION 6 – The BLM will utilize research-oriented vegetation treatments (i.e. cutting, mowing, goat grazing, out-of-season prescribed burning, etc.) in lieu of in-season prescribed burning (i.e. around October/September) to regenerate decadent stands on a case-by-case basis. The purpose of these research-oriented treatments will be to gain a better understanding of the effects of alternative vegetation management strategies, or for use in areas considered too hazardous to prescribe burn at certain times. The BLM expects that less than 500 acres of maritime chaparral habitat will be managed using research-oriented treatments. Should these methods produce favorable biological results, their application may be used more frequently when economical.
- BLM ACTION 7 – The BLM will utilize an integrated vegetation management program to eradicate noxious weed species in maritime chaparral that could include a combination of prescribed burning, manual removal, mowing, use of gas powered weed cutters, propane torches, and hand spraying of herbicide or vinegar. Noxious weed abatement would focus on eradicating/reducing existing infestations from spreading, and preventing the establishment of new infestations. Within the MRA where most of the maritime chaparral is located, infestations are typically found in openings created by past disturbances. For purposes of this HCP, the BLM will control, reduce or eradicate about 50 acres of infestation each year in maritime chaparral. Also, the BLM will protect against noxious weed infestations on about 1,000 to 1,500 acres of new habitat openings each decade that are expected to occur from fuel break development and maintenance, prescribed burning and wildfire, and research-oriented vegetation treatments.
- BLM ACTION 8 – The BLM will assess every two years maritime chaparral stands within the NRMA that are adjacent to private lands that are currently developed, or future development lands to determine fire threats to communities at risk. These areas will be designated Wildland Urban Interface Areas and special fuels management strategies will be considered. The BLM will periodically patrol these areas to educate landowners and visitors about wildfire risks, and fuels management/reduction strategies will be initiated in these areas to lessen the chance of a wildfire moving towards or from these communities. These fuel reduction measures would be meant to compliment the extensive fuelbreak that would be developed on the development lands that separate the NRMA on borderland parcels.
- BLM ACTION 9 – The BLM will produce (within 2 years of approval of the Habitat Conservation Plan) an estimate and mapped distribution of current

age classes of all maritime chaparral that has been transferred to the BLM, and will be transferred to the BLM as under the Habitat Conservation Plan.

No comment on Coastal Dune Scrub section

Oak Woodland

The BLM recommends language replacing the OBJECTIVES and management actions for Oak Woodland with:

OBJECTIVE: Maintain or improve the approximate extent, crown cover and quality of oak woodlands as documented in baseline surveys. Where possible, reestablish appropriate oak species in these baseline areas that had been degraded by historical uses. Manage remnant oak woodlands and restored stands to permit natural regeneration and to maximize the cover and dominance of native plant species, while minimizing the cover of nonnative species. Promote the reestablishment of natural biotic systems, including interacting microbial, invertebrate, and vertebrate communities, within restored woodlands.

The BLM recommends adding one specific BLM action for Oak Woodland management:

- o BLM ACTION 1 – The BLM will evaluate oak woodland regeneration within existing stands and plant native oak seedlings in areas that do not meet desired stocking levels. While site-specific restoration/improvement sites are difficult to delineate at this time, it is reasonable to expect that the BLM will restore or improve up to 10 acres of oak woodland habitat over the life of the HCP. This oak woodland habitat restoration/improvement estimate includes restoration that has already been conducted by the BLM since land transfer of 7,200 acres in 1996.

No comment on Annual Grassland

No comment on Maintenance of Migration Corridors

4.1.3 Aquatic and Riparian/Wetland Habitat Management

The BLM recommends language replacing the OBJECTIVES for Aquatic Habitat with:

OBJECTIVE: Maintain or enhance the number and quality of aquatic habitat locations that support or could support Covered Species such as CCG, CTS, CLRF, and California linderiella. Reduce public and educational visitation to locations that could degrade the quality or quantity of aquatic and associated riparian/wetland habitat. Enhance aquatic and associated riparian/wetland habitat that is currently degraded or destroyed with hardstand, or unneeded road and trail systems. Strive to eliminate all illegal vehicle/motor cycle trespass into aquatic and riparian/wetland habitats.

The BLM recommends changing Specific Action 3 to the following three specific actions:

- o BLM ACTION 1 – The BLM will evaluate visitation to aquatic habitat and adjacent areas to determine whether this use degrades habitat of Covered Species. Current authorized visitation to some aquatic habitats includes

access near pools along designated trail systems by recreational users (i.e. hikers, mountain bike riders, equestrians) and educational institutions (i.e. school staff and students, researchers, etc.). Should visitation be determined to be harmful as documented by HCP monitoring, then restrictions would be enacted to reduce this visitation.

- BLM ACTION 2 – The BLM will evaluate road and trail systems, and hardstand areas near aquatic habitats and riparian/wetland areas to determine whether these developments encumber potentially important aquatic or riparian/wetland habitat. The BLM will strive to relocate these transportation systems away from aquatic and riparian/wetland habitats, and restore unneeded hardstand areas. While site-specific restoration sites are difficult to delineate at this time, it is reasonable to expect that the BLM will restore up to 5 acres of aquatic and riparian/wetland habitat over the life of the HCP. This aquatic and riparian/wetland habitat restoration/improvement estimate includes restoration that has already been conducted by the BLM since land transfer of 7,200 acres in 1996.
- BLM ACTION 3 – The BLM will conduct periodic patrols by law enforcement officers and other visitor support staff to reduce or eliminate illegal vehicle use into aquatic and riparian/wetland habitats.
- BLM ACTION 4 – The BLM will evaluate pet use of aquatic habitat and adjacent areas to determine whether this use degrades habitat of Covered Species. Should visitation be determined to be harmful as documented by HCP monitoring, then restrictions would be enacted.

4.1.4 Fuelbreaks

The BLM recommends adding language to the Specific Action section for fuelbreaks with:

BLM Specific Action 1: Construct fuelbreaks of variable width depending upon fuel type, fuel loading (tons per acre), topographic position and features of the area. In many cases, paved and drivable dirt roads can be used as fuelbreaks, given that vegetation is managed adjacent to roads so that adequate fuelbreak width is maintained. The width of the adjacent vegetative treatments would typically vary from 10 to 30 feet on both sides of the drivable road. A typical interior fuelbreak width on each side of a road where shrubby vegetation is prevalent would be about one and a half times the height of the adjacent vegetation stand. This may increase slightly based upon the position on the slope, and side-slope grade. The exact number, size, configuration and acreage encumbered by fuelbreaks is difficult to determine at this time. For purposes of this HCP, the BLM would manage and maintain about 100 to 110 miles of drivable fuelbreak that would total about 300 to 310 acres of drivable road surface and sparsely vegetated road shoulder, and an additional 300 to 310 acres of fuel reduction treatments.

4.1.5 Erosion Control

The BLM recommends adding language to the OBJECTIVES and Specific Action sections for Erosion Control with:

OBJECTIVE: Reduce accelerated erosion caused by human use and intrusion, and restore those areas into healthy maritime chaparral where possible. Accelerated erosion is normally associated with road construction and maintenance (or lack of maintenance) and former military training of the Conserved Habitat Areas. Restoration should recreate, upon a disturbed landscape, the physical and biological characteristics and processes that produce equilibrium landforms bearing the highest quality habitat given the constraints of the region. The physical models for specific restoration sites comprise suitable reference sites selected from natural, functioning, undisturbed parts of the nearby landscape. The resulting restoration project should be indistinguishable from the surrounding terrain, given enough time to evolve toward the local climax ecology and equilibrium geomorphology.

BLM ACTION 1 - While site-specific erosion control sites are difficult to delineate at this time, it is reasonable to expect that the BLM will restore and stabilize up to 100 miles of former roads and/or associated gullies and unneeded hardstand areas over the life of the HCP. This will result in the restoration of between 100 to 150 acres of degraded habitat. This estimate is based upon aerial surveys of the route network conducted within the *Road and Trail Resources Inventory (RATRI): Bureau of Land Management Lands, Former Fort Ord, Monterey County, California* (2002) and consideration of the *Watershed Riparian Assessment Report* (2002). This erosion control, hardstand removal and habitat restoration estimate excludes the Army's restoration requirements associated with the munitions and explosives of concern (MEC) cleanup program, and includes restoration that has already been conducted by the BLM since land transfer of 7,200 acres in 1996.

4.1.7 Access Controls

The BLM recommends clarifying language within the OBJECTIVES and Specific Action sections for Access Control to explain that measures to prohibit unauthorized motor vehicle access into the NRMA via gates and/or fences is a responsibility of the borderland manager and not the adjacent NRMA manager.

4.1.8 Facilities Development, Maintenance and Repair

The BLM recommends adding language to the OBJECTIVES and Specific Action sections for Facility Development, Maintenance and Repair with:

OBJECTIVE: Develop, maintain, and repair facilities (including all structures and infrastructures) as necessary to avoid impacts to Covered Species or their habitats. Overall, undeveloped areas in the Conserved Habitat Areas will be maintained in a

natural state. No more than 2% of the areas with natural vegetation may be converted into areas having buildings, roads, trails or other development oriented uses.

BLM ACTION 1: Develop, maintain and repair a limited number of facilities required to fulfill overall management goals, and reduce or eliminate maintenance backlogs. Develop any necessary new roads, buildings, parking areas, or other facilities in such a manner that avoids to the maximum extent possible any impacts to listed species and their critical habitats. If there are unavoidable impacts to these sensitive resources, the BLM would avoid adversely impacting more than 2% of the known areas occupied by either listed species or their critical habitats.

BLM ACTION 2: Develop new facilities as needed outside occupied habitat of federally listed species to the maximum extent possible. New facility development (including parking areas, buildings, etc.) would encumber less than 2 percent of the land base. The BLM would not count against the 2% development restriction any facility development that involved closing and restoring existing facilities and developing alternative facilities to lessen overall impacts to sensitive resources in a given area. Development of facilities within BLM's Fort Ord Project Office development parcel would also not be counted against the 2% development restriction on NRMA habitat parcels.

4.1.9 Road and Trail Development and Maintenance

The BLM recommends adding language to the Road and Trail Development and Maintenance OBJECTIVES and specific actions with:

OBJECTIVES: Develop, maintain and improve roads within the Conserved Habitat Areas that are necessary for land management purposes and provide opportunities for compatible public access on a system of well-defined and maintained trails. Eliminate and restore existing road and trail systems that are redundant or unneeded, and strive to reroute needed transportation systems away from occupied habitat of HCP species where possible -- especially State and Federally listed species. Overall, undeveloped areas in the Conserved Habitat Areas will be maintained in a natural state. No more than 2% of the areas with natural vegetation may be converted into areas having buildings, roads, trails or other development oriented uses.

BLM Action 1: Develop, manage and maintain a system of roads and trails necessary for land management purposes and compatible public access within the Conserved Habitat Area. The exact location, number and configuration of the road and trail network is difficult to delineate at this time. For purposes of this HCP, the BLM would manage and maintain about 100 to 110 miles of drivable road (administrative purposes), and an additional 50 to 75 miles of recreational trails. This would encumber about 330 to 355 acres of road/trail surface and sparsely vegetated road/trail shoulder.

BLM Action 2: Close and rehabilitate (retire) redundant or unneeded road and trail systems within the Conserved Habitat Areas. While site-specific road and trail retirement sites are difficult to delineate at this time, it is reasonable to expect that the

BLM will restore and stabilize up to 100 miles of former roads over the life of the HCP. This will result in the restoration of between 100 to 150 acres of degraded habitat. This estimate is based upon aerial surveys of the route network conducted within the *Road and Trail Resources Inventory (RATRI): Bureau of Land Management Lands, Former Fort Ord, Monterey County, California (2002)*. This road and trail retirement estimate includes restoration that has already been conducted by the BLM since land transfer of 7,200 acres in 1996.

BLM Action 3: Develop new routes when needed outside occupied habitat of federally listed species to the maximum extent possible. New route development (including administrative access roads, fuelbreak roads, recreation trails) would encumber less than 2 percent of the land base. The BLM would not count against the 2% development restriction any reroutes of trails or roads that involved closing certain route segments and opening alternative route segments to lessen overall impacts to sensitive resources in a given area. Development of routes within BLM's Fort Ord Project Office development parcel would also not be counted against the 2% development restriction on NRMA habitat parcels.

4.1.10 Restoration

The BLM recommends adding language to the Restoration section with:

Restoration activities, for purposes of this HCP, include the removal of artificially created landscape structures and features (i.e. old Army roads and hardstand areas) and establishment of native vegetation and Covered Species populations. Many of the Fort Ord reserve areas have a commitment to restore native habitat. With the goal of enhancing and restoring degraded areas in the NRMA, the BLM will restore an average of 0-10 acres per year of degraded lands to enhance Covered Species and their habitats. While site-specific restoration sites are difficult to delineate at this time, it is reasonable to expect that the BLM will restore and stabilize up to 100 miles of former roads and associated gullies and unneeded hardstand areas over the life of the HCP. This will result in the restoration of between 100 to 150 acres of degraded habitat. This habitat restoration estimate excludes the Army's restoration requirements associated with the munitions and explosives of concern (MEC) cleanup program, and includes restoration that has already been conducted by the BLM since land transfer of 7,200 acres in 1996.

Other Primarily Editorial Comments

Pg. 3 2nd to last paragraph.

Monterey ceanothus and ornate shrew said to be previously under listed species categories but they weren't.

Pg. 5 4th paragraph

"Borderlands" used but not defined like other terms such as Conserved Habitat Areas - change 'and' to 'an' ongoing program of adaptive management

pg. 7 first sentence

“Confirm presence of black legless lizard as measured against adjusted baseline”.
Suggest adding here “as described in Section 6.3.3.7 on page 97

3rd paragraph

‘Natural Lands’ used perhaps for first time but is it defined here or elsewhere?

Table 4.

Coastal Scrub occurs on NRMA and should have its box checked for NRMA.

This table appears to lump and rename habitat types which results in a list of habitat types different than listed in Appendix D for Land Use Status Monitoring. These should probably be identical to avoid confusion between monitoring efforts. (e.g. when setting out BLL coverboards which list of habitat types would be used?).

Table 5.

If CTS recently was documented at catfish pond on youth camp parcel should it’s box be checked for Habitat Corridor/Youth Camp?

Pg. 30 3rd paragraph

Use of the term riparian forests may not be applicable to willow/sycamore canopies in ephemeral drainages within NRMA.

Pg. 65 section 4.2.3

Suggest changing ‘scotch broom’ to ‘French broom’ since the latter is far more common and a problem on Ord.

Suggest adding yellow star thistle, bull thistle, Tribolium bunchgrass, and Klamath weed to list of marquee weeds.

Pg. 73 Section 5.2.3

June through August vegetation clearance is window suggested to “avoid impacts to Covered annual plants” but such vegetation clearance would impact Seaside birds beak at critical growth time. We would suggest adding the following exception; “In areas where “Seaside birds beak or Congdon’s tarplant is known to occur vegetation clearance would only be done between December 1 – February 1 to avoid impacts to these two late-season annual plant species.”

Pg. 89 Section 6.3.1.1

“Relative accurate estimates of numbers of individual plants can be made but (absolute) numbers of individuals ... can vary...” We suggest adding the word ‘absolute’ to avoid confusion in this sentence.

Pg 92 Section 6.3.2 (perennial shrub species monitoring)

Middle of top paragraph states “Success for each separate reserve area...” and then it states “There shall be no increase in area from adjusted baseline...” of negative factors. It isn’t clear if 15,000 acre (or 7,200 acre) NRMA would be considered a separate reserve area and if the requirement for “no increase” of negative factors would apply to the 15,000 acre or 7,200 acre BLM parcel.

Pg 95 Section 6.3.3.5 (linderiella)

"...seines to be examined every 5 linear meters." This may be impractical when seining most ponds on Fort Ord that are over waist deep or larger than 40 sq ft. The BLM has only observed UC Davis CTS researchers seining from one end of pond to other with some difficulty. To stop every 5 meters to pull up the seine net just may be impractical.

Figure A-13 CTS map

Pond 60 is listed in upper legend as L MGF so this may be confusing to some.

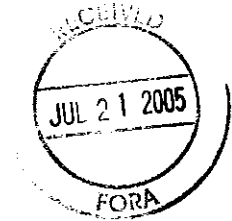
Best to call it the same in both places.



MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

5 HARRIS COURT, BLDG. G
POST OFFICE BOX 85
MONTEREY, CA 93942-0085 • (831) 658-5600
FAX (831) 644-9560 • <http://www.mpwmd.dst.ca.us>

July 20, 2005



Steven Endsley
Director of Planning and Finance
FORA
100 12th Street, Building 2880
Marina, CA 93933

**SUBJECT: MPWMD COMMENT ON NOTICE OF PREPARATION OF EIR ON
FORT ORD HABITAT CONSERVATION PLAN**

Dear Mr. Endsley:

The Monterey Peninsula Water Management District (MPWMD or District) appreciates this opportunity to comment on the above-referenced Notice of Preparation (NOP) of an Environmental Impact Report (EIR) on the Fort Ord Habitat Conservation Plan. The MPWMD is responsible for water resources management for the Monterey Peninsula, including portions of the former Fort Ord from Highway 68/Los Laureles Grade to the southern boundary of the City of Marina. A significant portion of the project area is within the District boundaries.

The District concurs with the goals and objectives of the Habitat Conservation Plan (HCP). Related to the topics of "Land Use and Planning" and "Public Services/Utilities/Water Supply," the District requests that the EIR consider means to facilitate District and/or other entities' water supply projects that are necessary to meet community needs. Examples include:

- Identify preferred corridors for pipeline alignments and other water supply facilities;
- Coordination with other infrastructure such as new and/or improved roads;
- Designate preferred areas for water supply facility development;
- For areas that are not identified as preferred for water supply development, create a process to allow case-specific review or mitigation measures to enable location of lower-impact water project components (such as injection wells) in the area due to compelling reasons such as superior hydrogeology.

Under "Cumulative Impacts" please consider potential MPWMD projects such as the Phase 1, 2 and 3 aquifer storage and recovery (ASR) projects described in the District's December 13, 2004 NOP, which is enclosed for reference.

Continued...

A handwritten signature, possibly "S", located at the bottom right of the page.

Steven Endsley
July 20, 2005
Page 2

Thank you for your consideration of these comments. The MPWMD contact person is Henrietta Stern, Project Manager at 831/658-5621 or henri@mpwmd.dst.ca.us.

Sincerely,

A handwritten signature in cursive script that reads "Henrietta Stern". The signature is written in black ink and is positioned to the right of the word "Sincerely,".

Henrietta Stern
Project Manager

Enclosure: December 13, 2004 NOP for ASR Project

U:\Henri\wp\ceqa\2005\NOP\FtOrdHCP072005.doc
Review by DAB, DD



MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

5 HARRIS COURT, BLDG. G
POST OFFICE BOX 85
MONTEREY, CA 93942-0085 • (831) 658-5600
FAX (831) 644-9560 • <http://www.mpwmd.dst.ca.us>

Notice of Preparation of Environmental Impact Report MPWMD Aquifer Storage and Recovery Project

December 13, 2004

TO RESPONSIBLE AGENCIES AND INTERESTED PARTIES:

The Monterey Peninsula Water Management District (MPWMD) is proposing an aquifer storage and recovery (ASR) project that will allow for changes in water supply operations in the Carmel River and Seaside Groundwater Basins that will benefit the natural resources of the Carmel River and the groundwater resources of the Seaside Groundwater Basin. The project includes both near-term and long-term modifications to MPWMD's existing test-scale ASR project located on former Fort Ord lands overlying the coastal subunits of the Seaside Groundwater Basin. The ASR project would continue and expand diversions of excess winter flows from the Carmel River under specified conditions and store this water in the Seaside Groundwater Basin coastal subareas. A portion of this stored water would be available for extraction and use through the California American Water (Cal-Am) existing distribution system during dry periods in lieu of pumping water from the Carmel River Basin. A smaller portion of the injected water would remain in the Seaside Groundwater Basin to facilitate recovery of water levels from over-pumping in the Basin.

The MPWMD is the lead agency for this project under the California Environmental Quality Act (CEQA), and has determined that an Environmental Impact Report (EIR) will be prepared to evaluate the environmental effects of the ASR project and its alternatives (*See attached Notice of Preparation*). The MPWMD needs to know your views regarding the scope and issues that should be evaluated in the EIR. The MPWMD requests that *written comments* be submitted as early as possible but no later than **Monday, January 17, 2005**. Written comments and questions should be sent to:

Henrietta Stern, Project Manager
MPWMD
PO Box 85
Monterey, Ca 93942-0085

e-mail: henri@mpwmd.dst.ca.us

phone: 831/658-5621
fax: 831/644-9560

Two scoping meetings will be held to solicit public and agency input to the planning process and impact assessment for the ASR project. *Two meetings* will be held at the MPWMD office as follows:

Wednesday, January 12, 2005
3:00 pm - 4:30 pm (first session)
6:30 pm - 8:00 pm (second session)

MPWMD Conference Room
5 Harris Court, Building G (Ryan Ranch)
Monterey, CA 93940

Documents and files related to the proposed project can be reviewed at the above address. Thank you in advance for your interest in the ASR project and timely response to this Notice.

**Monterey Peninsula Water Management District
Aquifer Storage and Recovery Project
Environmental Impact Report**

Notice of Preparation

INTRODUCTION

The Monterey Peninsula Water Management District (MPWMD) is proposing a water management project that will *allow for changes in water supply operations in the Carmel River and Seaside Groundwater Basins that will benefit the natural resources of the Carmel River and the groundwater resources of the Seaside Groundwater Basin*. The project includes both near-term and long-term modifications to MPWMD's existing test-scale aquifer storage and recovery (ASR) project located on former Fort Ord lands overlying the coastal subunits of the Seaside Groundwater Basin. The ASR project would continue and expand diversions of excess winter flows from the Carmel River under specified conditions and store this water in the Seaside Groundwater Basin coastal subareas. A portion of this stored water would be available for extraction and use through the California American Water (Cal-Am) existing distribution system during dry periods in lieu of pumping water from the Carmel River Basin. A smaller portion of the injected water would remain in the Seaside Groundwater Basin to facilitate recovery of water levels from over-pumping in the Basin. The MPWMD will also be evaluating alternatives to achieve its water management goals.

The MPWMD is acting as the lead agency for this project under the California Environmental Quality Act (CEQA), and is preparing an Environmental Impact Report (EIR) to evaluate the environmental effects of the ASR project and its alternatives. The EIR will be structured to provide a detailed level of analysis for the first phase of the project and a programmatic evaluation of longer-term elements of the project.

LOCATION

The project is located in Monterey County, California and is within the boundaries of the MPWMD (Figure I). The infrastructure for the ASR component includes groundwater extraction wells in the Carmel River Basin; a pipeline extending from Carmel Valley north to Fort Ord; water pumping, storage and treatment facilities located along this pipeline; and injection and extraction wells located on former Fort Ord (Figures 2, 3 and 4).

BACKGROUND

The MPWMD manages and regulates the use, reuse, reclamation, and conservation of water within its boundaries. The MPWMD conserves and augments water supplies by the integrated management of ground and surface water resources. About 80% of water within the MPWMD boundaries is collected, stored, and distributed by Cal-Am, which serves about 95% of Peninsula residents and businesses. Over 70% of the water delivered by Cal-Am is diverted from the Carmel River Basin. Cal-Am owns two dams and a series of wells along the Carmel River.

For many years it has been recognized that the current level of pumping from the Carmel River Basin has adverse effects on lower Carmel River natural resources, particularly in dry years. Cal-Am, MPWMD and the State have sought alternative water sources and alternative water management actions so that pumping could be reduced in the lower river and natural habitats could recover. Pumping of water from the Seaside Groundwater Basin has increased, especially in dry periods, to allow for a lowered level of pumping in the Carmel River Basin. This increased groundwater pumping has, in turn, led to a gradual lowering of water levels in the Seaside Basin, threatening its long-term reliability as a local source of domestic water supply.

Since 1996, the MPWMD has evaluated the feasibility of an ASR project. Efforts have included hydrogeologic testing and construction of pilot and full-scale test injection wells on former Fort Ord. This testing has found that the Seaside Basin can be successfully used to store water for future use in the Cal-Am system. Recently, MPWMD's Santa Margarita test well has been used to provide water to the Cal-Am system when Cal-Am's wells have required repair or maintenance. An ASR project is viewed by MPWMD as one way to improve water management capabilities to the benefit of Carmel River natural resources and Seaside Groundwater Basin long-term reliability.

WATER RIGHTS

The SWRCB is the entity that administers water rights in the Carmel Valley alluvial aquifer area. Previous decisions by the SWRCB have identified water rights held (or permits that need to be obtained) by various entities in Carmel Valley. The SWRCB has determined that the Carmel River is over-appropriated in the drier season of the year (i.e., May 1 to December 31). The MPWMD was issued water rights associated with mainstem reservoirs on the Carmel River (SWRCB Permits 20808 and 7130B). As part of the existing ASR project testing, the SWRCB issued annual temporary urgency permits to MPWMD to divert Carmel River water for injection well testing. In October 2001, MPWMD submitted a Petition for Change based on the 1995 water rights permits associated with the New Los Padres Project. The petition requests use of the Seaside Basin as a place of storage for some of the Carmel River water, rather than use of a dam on the Carmel River. The petition was revised in September 2003. Approval of this petition would provide a water source (up to 7,300 AFA) for the ASR project that is the subject of this Notice Of Preparation (NOP). The SWRCB will use the information in this EIR to help determine whether the petition should be granted.

THE PROPOSED PROJECT

The proposed ASR project would be constructed in phases.

The first phase would require minimal new construction and would take advantage of existing water collection, delivery and injection/extraction facilities, owned and operated by Cal-Am and MPWMD. This phase will be described and analyzed in detail in the EIR, as the location, size and operational characteristics are well defined. Water would be diverted from the Carmel River during high flow periods using existing Cal-Am wells in the lower stretches of the river. Up to 2,022 AF would be diverted annually between December and May, and would be treated at the Cal-Am Begonia Iron Removal Plant (BIRP) before being transported through the Segunda pipeline to the Seaside portion of the Cal-Am water distribution network. A new booster pump would be constructed at the Cal-Am's Hilby Avenue pump site and a new 16-inch diameter, 6,800 feet long, water conveyance pipeline would be placed in the ground on Army property

along the western side of General Jim Moore Boulevard from the east end of Hilby Avenue to the existing MPWMD Santa Margarita ASR test well site just south of Eucalyptus Road (Figure 2).

These improvements would allow transport of up to 2,022 AFA to the well site for injection. A second injection/extraction well would be constructed at the Santa Margarita test well site, allowing for injection and extraction of water at approximately 800 feet below the ground surface, in the Santa Margarita Sandstone aquifer. These two wells would allow for injection of Carmel River water during wet periods and extraction of water for use by Cal-Am customers during dry periods. Maximum extraction would be approximately 1,690 AFA, and the project would be operated to initially leave a portion of the injected water in the aquifer to allow for groundwater basin recovery.

The second phase of the project would provide for a greater diversion of water from the Carmel River during high flows for transport and injection into the Seaside Groundwater Basin. This intermediate-term project will be analyzed at a program-level in the EIR because detailed planning and description of the facilities have not been completed. The Phase I ASR facilities would be augmented with:

- a second dual-well site (four ASR wells total) located north and east of the existing site;
- a new 400 horsepower (hp) pump at the existing Cal-Am Del Rey Oaks pumping station; and
- a new dedicated transmission pipeline (18- to 24-inch diameter) constructed along General Jim Moore Boulevard to the new well site (Figure 3).

This phase would maximize utilization of “excess” capacity in existing Cal-Am Carmel Valley diversion, treatment, and conveyance facilities to the Seaside/Del Rey Oaks area. Up to 3,234 AF would be diverted annually and injected into the Santa Margarita Sandstone aquifer in the Seaside Groundwater Basin to serve the same purposes as Phase I facilities. Maximum extraction would be approximately 4,057 AFA. A separate project-level EIR will be prepared for Phase II when a decision to pursue Phase II is approved by the MPWMD Board and facilities are better defined.

The third phase of the project would be designed to maximize use of MPWMD’s Petition for Change on the Carmel River, allowing diversion of up to 7,300 AFA from the river for injection in the Seaside Groundwater Basin. This long-term project will be analyzed at a program-level in the EIR because detailed planning has not been completed for the various elements of the project. The Phase I and II project facilities would be augmented by some significant new construction, including:

- three new diversion wells (or a single radial collector) below River Mile (RM) 5.5 on the Carmel River;
- dedicated raw water pipeline (approximately 23,000 feet, 16- to 24-inch diameter) from the diversion well(s) to the proposed new treatment plant;
- seven million gallon per day ([mgd] or 5,000 gpm) conventional treatment plant near Cal-Am’s existing Segunda Tank located between the Carmel Valley and Del Rey Oaks;
- raw water storage tank (150,000 gallons) at the new treatment plant;
- treated water pipeline (approximately 28,000 feet 30-inch diameter) from new treatment plant to ASR wellfield;
- pump station (1,000 hp) at Segunda Tank site;
- 7 mgd pressure reducing station at Segunda Tank site;

- 4,000-foot tunnel from the Segunda Tank site intersecting the existing Cal-Am easement on the north side of hill; and
- one additional dual ASR well site located northeast of the existing Santa Margarita test well site (Figure 4).

These new facilities would allow MPWMD to inject up to 7,300 AFA into the Santa Margarita Sandstone aquifer and extract up to 6,085 AFA for use in the Cal-Am water distribution system. A separate project-level EIR will be prepared for Phase III when a decision to pursue Phase III is approved by the MPWMD Board and facilities are better defined.

ALTERNATIVES

The MPWMD is proposing to evaluate a full range of alternatives in the EIR that meet the project purposes of protecting Carmel River natural resources and Seaside Groundwater Basin water resources through improved water management within MPWMD's boundaries. Currently, the EIR will include evaluation of:

- a no project alternative;
- alternative water sources (including reclaimed wastewater) that could be obtained to allow for reduced dry season pumping along the Carmel River and restoration of groundwater levels in the Seaside Groundwater Basin;
- alternative locations for pipelines transporting water from former Fort Ord's southern boundary to the MPWMD Santa Margarita test well site; and
- alternative injection/extraction well sites.

The MPWMD may formulate additional alternatives as the scoping and alternatives development process moves forward.

ENVIRONMENTAL ISSUES

Scoping is an early and open process designed to determine the issues and alternatives to be addressed in the EIR. At this point in the project planning process, MPWMD has identified the following issues as likely concerns of the community and agencies:

- impacts to federal and state protected species, including (but not limited to) Carmel River steelhead, California red-legged frog, California tiger salamander, California black legless lizard, and numerous plant species associated with maritime chaparral;
- impacts to sensitive habitats, including riparian areas, oak woodland, and maritime chaparral;
- impacts to cultural resources;
- impacts to surface water hydrology, quantity and quality in the Carmel River;
- impacts to groundwater quantity and quality in the Seaside Groundwater Basin;
- impacts related to geologic and soil conditions, including seismic events and slope stability;
- impacts to local and regional air quality from construction activities and operation of project facilities;

- changes in land use patterns and creation of incompatible land use conditions;
- changes in local views and natural landscapes;
- increases in local noise conditions associated with construction activities and operation of project facilities;
- increases in public health and safety risks associated with construction activities and storage and use of hazardous materials;
- impacts to existing infrastructure and utility systems, including water supply distribution and roadways;
- cumulative effects; and
- growth inducing effects

SCOPING MEETINGS

The MPWMD plans to hold scoping meetings to solicit public and agency input to the planning process and impact assessment for the ASR project. Two meetings will be held on one day as described below:

Wednesday, January 12, 2005

3:00 pm - 4:30 pm (first session)

6:30 pm - 8:00 pm (second session)

Location:

MPWMD Conference Room

5 Harris Court, Building G

Ryan Ranch

Monterey, CA

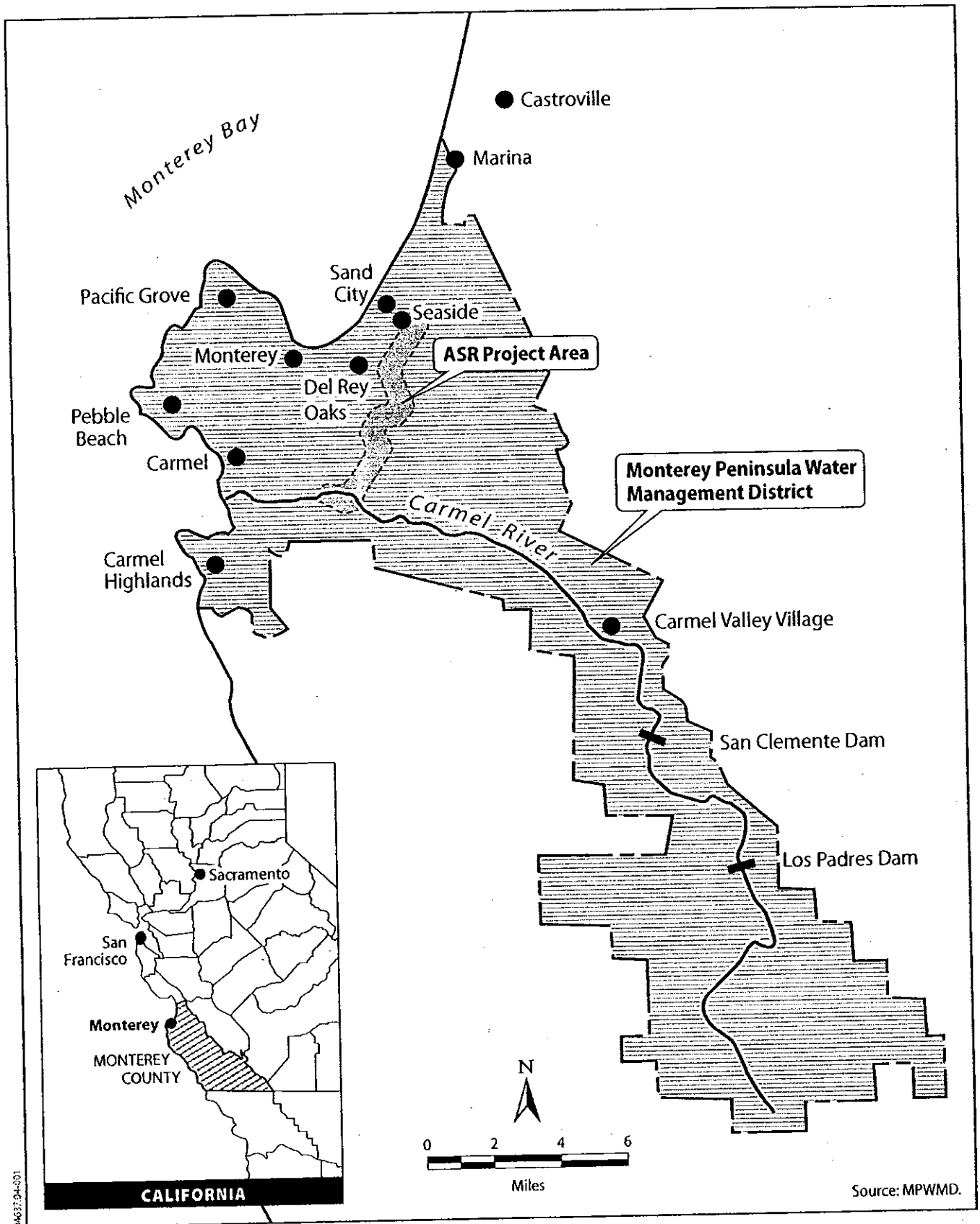
WRITTEN COMMENTS

The MPWMD requests agency and public input on the scope and issues that should be evaluated in the EIR. CEQA requires that comments be submitted to the MPWMD at the earliest possible date, but not later than January 17, 2005. Comments should be sent to:

Henrietta Stern, Project Manager
Monterey Peninsula Water Management District
P.O. Box 85
(5 Harris Court, Building G)
Monterey, CA 93942-0085
Phone: 831.658.5621

Documents and files related to the proposed project can be reviewed at the above address.

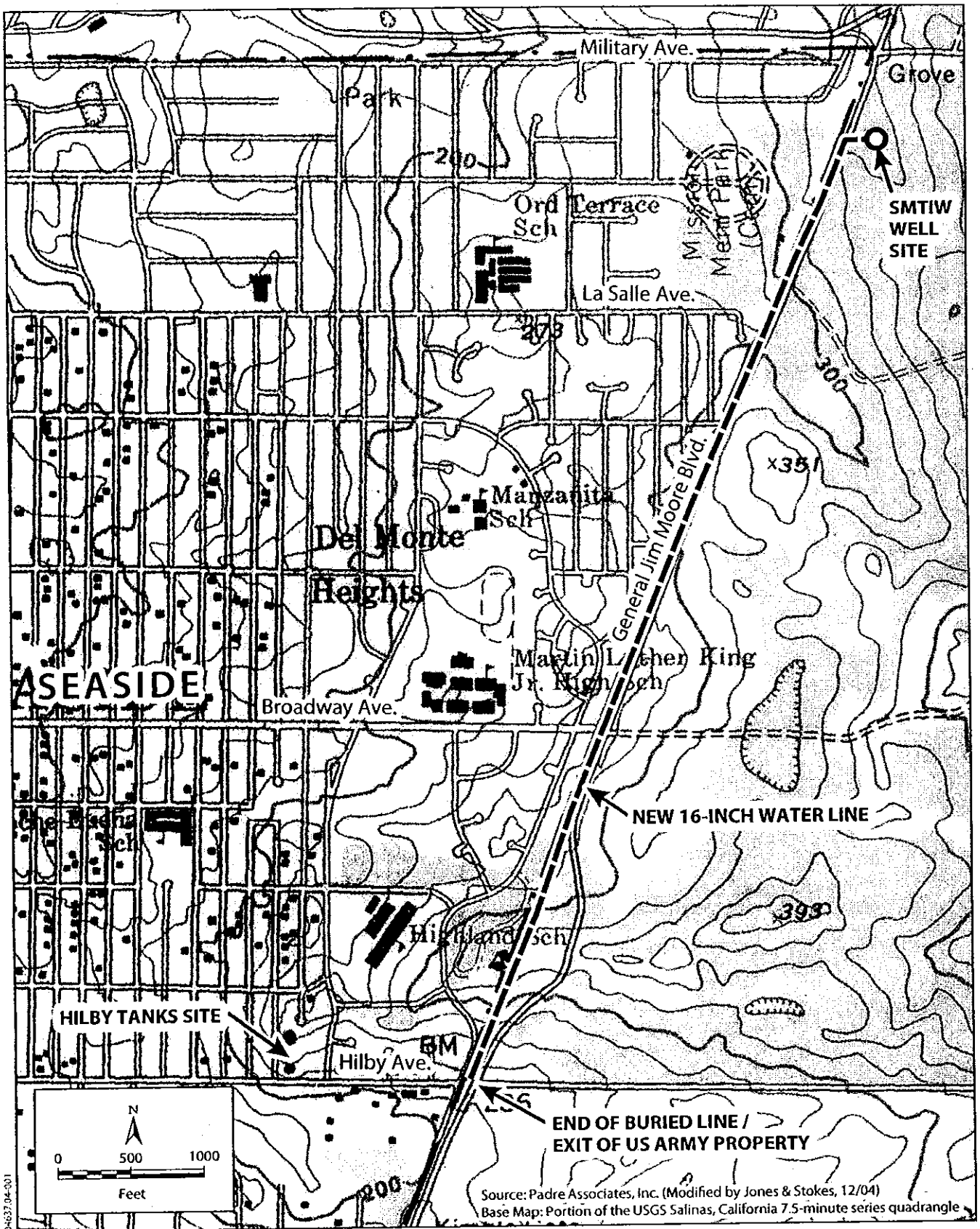
U:\Henri\wp\augwater04\NOPASR120704.doc
Prepared by Jones & Stokes, December 7, 2004



Source: MPWMD.

Figure 1
Monterey Peninsula Water Management District
Service Boundary and ASR Project Area

04637-04-001



04-637-04-001

Figure 2
Phase I ASR Project Facilities Locations

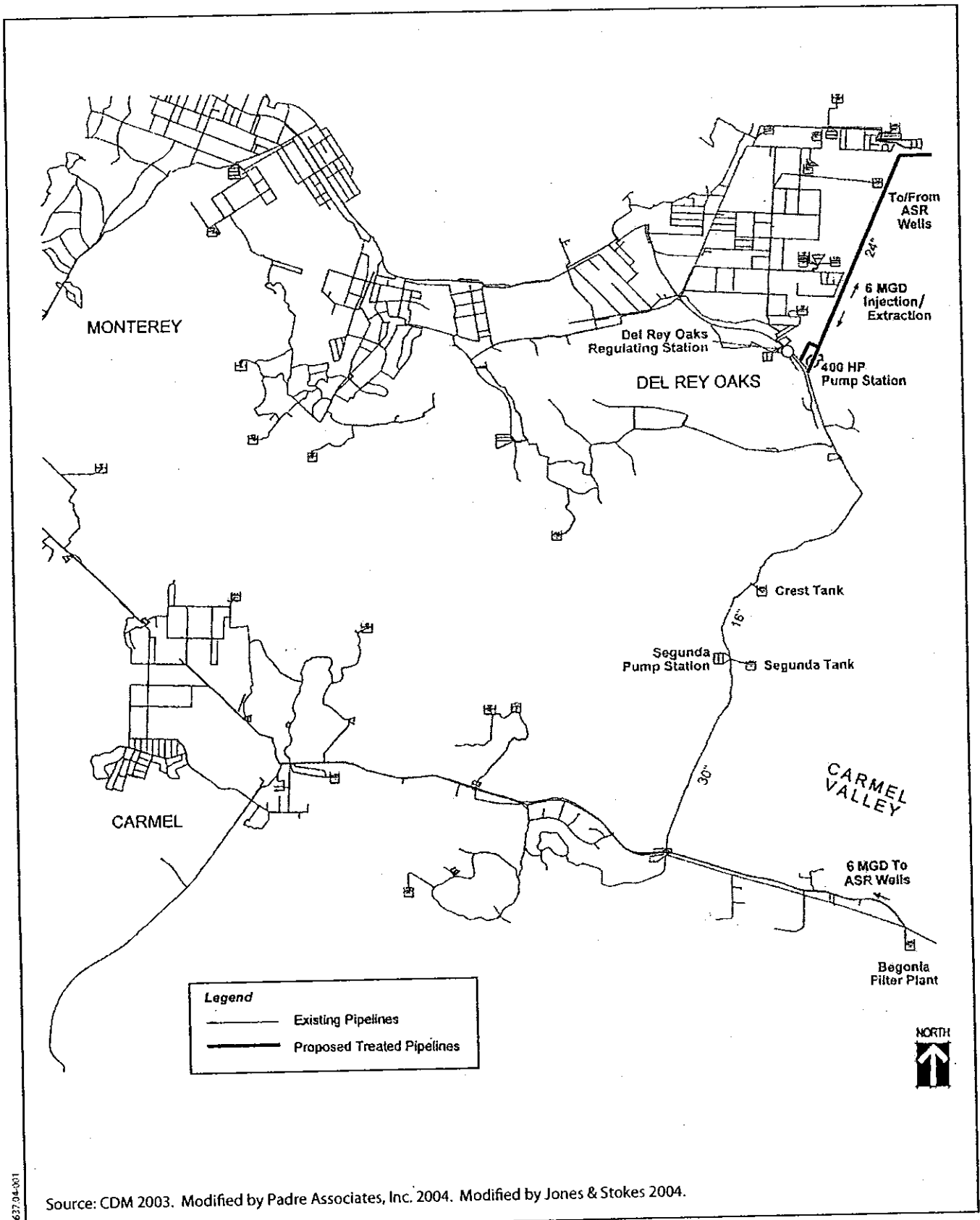
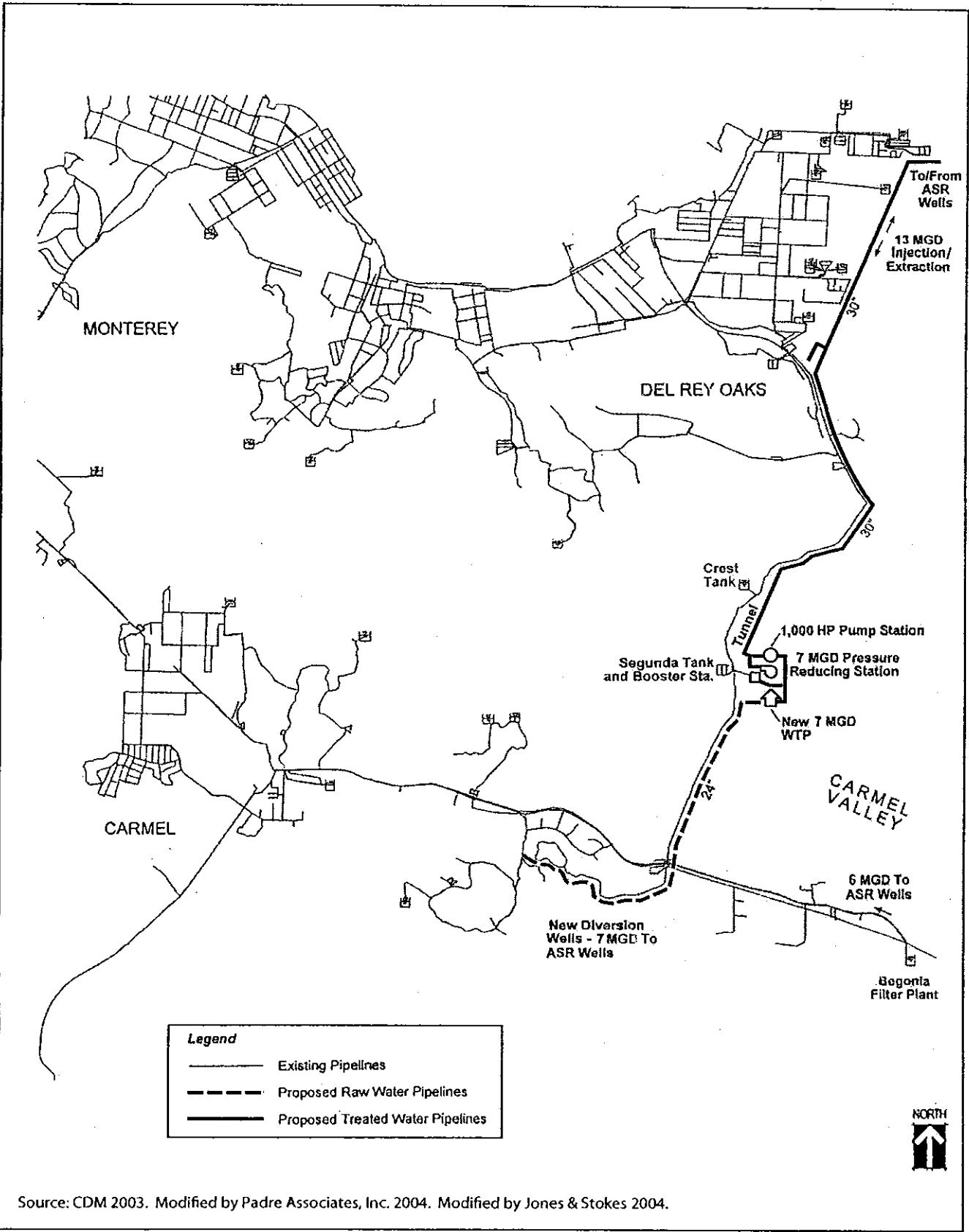


Figure 3
Conceptual Project Facilities
Phase II ASR Project



04637.05-001

Figure 4
Conceptual Project Facilities
Phase III ASR Project



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



Arnold
 Schwarzenegger
 Governor

Sean Walsh
 Director

Notice of Preparation

June 21, 2005



To: Reviewing Agencies
 Re: Fort Ord Habitat Conservation Plan EIR
 SCH# 2005061119

Attached for your review and comment is the Notice of Preparation (NOP) for the Fort Ord Habitat Conservation Plan EIR draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Steven Endsley
 Fort Ord Reuse Authority
 100 12th Street, Building 2880
 Marina, CA 93933

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
 Project Analyst, State Clearinghouse

Attachments
 cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2005061119
Project Title Fort Ord Habitat Conservation Plan EIR
Lead Agency Fort Ord Reuse Authority

Type NOP Notice of Preparation

Description The Service has recommended that all non-Federal entities acquiring lands at the former Fort Ord apply for section 10(a)(1)(B) incidental take permits for all species covered in the HMP (Covered Species). In addition, CDFG requires non-Federal entities to obtain incidental take permits pursuant to section 2081 of the California Fish and Game Code if state-listed species will be taken. Seven animal species and twelve plant species that are either listed, candidates, or designated species of concern are proposed Covered Species under the HCP.

To apply for such permits, applicants must submit a conservation plan along with their applications. The HCP, integrating key components of the HMP with additional elements required of an HCP (pursuant to 50 CFR 17.22(b)) is being prepared to provide a stand-alone HCP that is satisfactory to the Service and CDFG.

Incidental take of Covered Species is proposed to occur as the former base is redeveloped consistent with the HCP. The proposed activities covered in the Draft HCP include rehabilitation and construction of roads, utilities and other infrastructure to support new research/educational, residential, commercial, light industrial, recreational and other development, generating approximately 18,000 jobs. Management activities on non-federal lands such as weed control, fencing, and burning will also be included as proposed covered activities in the HCP. About 12,000 housing units are anticipated to be constructed on the former base supporting a population of about 37,000 people. To accommodate this growth and development, up to 6,000 acres of existing habitat on the former base will be removed. However, the base-wide program for habitat preservation and management of approximately 17,600 acres of lands on former Fort Ord is intended to minimize and fully mitigate losses to Covered Species and their habitats that would result from base redevelopment. The requested permit term is 50 years.

**Document Details Report
State Clearinghouse Data Base**

Lead Agency Contact

Name Steven Endsley
Agency Fort Ord Reuse Authority
Phone (831) 883-3672 **Fax**
email
Address 100 12th Street, Building 2880

City Marina **State** CA **Zip** 93933

Project Location

County Monterey
City Marina, Seaside
Region

Cross Streets

Parcel No.

Township	Range	Section	Base
-----------------	--------------	----------------	-------------

Proximity to:

Highways 1
Airports Marina, Monterey
Railways
Waterways Pacific Ocean
Schools Yes
Land Use Various designations under the existing FORA Base Reuse Plan (1997)

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Coastal Zone; Cumulative Effects; Drainage/Absorption; Economics/Jobs; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife

Reviewing Agencies Resources Agency; Regional Water Quality Control Board, Region 3; Department of Parks and Recreation; Native American Heritage Commission; Office of Historic Preservation; Department of Fish and Game, Region 3; Department of Water Resources; California Coastal Commission; California Highway Patrol; Caltrans, District 5; State Lands Commission; Caltrans, Division of Aeronautics

Date Received 06/21/2005 **Start of Review** 06/21/2005 **End of Review** 07/20/2005

NOP Distribution List

County: Monterey

SCH# **2005061119**

Resources Agency

- Resources Agency
Nadell Gayou

- Dept. of Boating & Waterways
David Johnson

- California Coastal Commission
Elizabeth A. Fuchs

- Colorado River Board
Gerald R. Zimmerman

- Dept. of Conservation
Roseanne Taylor

- California Energy Commission
Environmental Office

- Dept. of Forestry & Fire Protection
Allen Robertson

- Office of Historic Preservation
Wayne Donaldson

- Dept. of Parks & Recreation
B. Noah Tilghman
Environmental Stewardship Section

- Reclamation Board
DeeDee Jones

- Santa Monica Mountains Conservancy
Paul Edelman

- S.F. Bay Conservation & Dev't. Comm.
Steve McAdam

- Dept. of Water Resources
Resources Agency
Nadell Gayou

Fish and Game

- Depart. of Fish & Game
Scott Flint
Environmental Services Division

- Fish & Game Region 1
Donald Koch

- Fish & Game Region 2
Ranky Curtis

- Fish & Game Region 3
Robert Floerke

- Fish & Game Region 4
William Laudermilk

- Fish & Game Region 5
Don Chadwick
Habitat Conservation Program

- Fish & Game Region 6
Gabrina Gatchel
Habitat Conservation Program

- Fish & Game Region 6 UM
Tammy Allen
Inyo/Mono, Habitat Conservation Program

- Dept. of Fish & Game M
George Isaac
Marine Region

Other Departments

- Food & Agriculture
Steve Shaffer
Dept. of Food and Agriculture

- Dept. of General Services
Public School Construction

- Dept. of General Services
Robert Sleppy
Environmental Services Section

- Dept. of Health Services
Veronica Ramenz
Dept. of Health/Drinking Water

Independent Commissions, Boards

- Coachella Valley Mountains Conservancy

- Delta Protection Commission
Debbie Eddy

- Office of Emergency Services
Dennis Castrillo

- Governor's Office of Planning & Research
State Clearinghouse

- Native American Heritage Comm.
Debbie Treadway

- Public Utilities Commission
Ken Lewis

- San Gabriel & Lower LA Rivers Conservancy
San Joaquin River

- State Lands Commission
Jean Sarino

- Tahoe Regional Planning Agency (TRPA)
Cherry Jacques

Business, Trans & Housing

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Sandy Hesnard

- Caltrans - Planning
Terr Pencovic

- California Highway Patrol
John Olejnik
Office of Special Projects

- Housing & Community Development
Lisa Nichols
Housing Policy Division

Dept. of Transportation

- Caltrans, District 1
Mike Eagan

- Caltrans, District 2
Don Anderson

- Caltrans, District 3
Jeff Pulverman

- Caltrans, District 4
Tim Sable

- Caltrans, District 5
David Murray

- Caltrans, District 6
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- State Water Resources Control Board
Jim Hockenberry
Division of Financial Assistance

- State Water Resources Control Board
Student Intern, 401 Water Quality Certification Unit
Division of Water Quality

- State Water Resources Control Board
Steven Herrera
Division of Water Rights

- Dept. of Toxic Substances Control
CEQA Tracking Center

- Department of Pesticide Regulation

Regional Water Quality Control Board (RWQCB)

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Catherine Hudson
North Coast Region (1)

- RWQCB 2
Environmental Document Coordinator
San Francisco Bay Region (2)

- RWQCB 3
Central Coast Region (3)

- RWQCB 4
Jonathan Bishop
Los Angeles Region (4)

- RWQCB 5S
Central Valley Region (5)

- RWQCB 5F
Central Valley Region (5)
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- RWQCB 6
Lahontan Region (6)

- RWQCB 6V
Lahontan Region (6)
Victorville Branch Office

- RWQCB 7
Colorado River Basin Region (7)

- RWQCB 8
Santa Ana Region (8)

- RWQCB 9
San Diego Region (9)

- Other _____



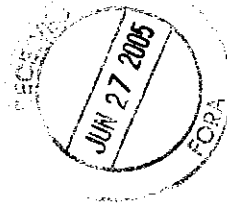
MONTEREY BAY

Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

June 23, 2005



Mr. Steven Endsley, Director
Planning and Finance
Fort Ord Reuse Authority
100 12th street
Building 2880
Marina, CA 93933

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Monterey County

SUBJECT: NOP FOR DEIR HABITAT CONSERVATION PLAN

Staff has reviewed the referenced document and has the following recommendations for a scope of work for the air quality analysis:

1. Direct and indirect source emissions (VOC and NO_x) from all proposed operational activities should be quantified and assessed. VOC and NO_x emissions need not be quantified for "typical" construction activity. Staff should be consulted regarding potential construction equipment to be used on the project.
2. Project operational and construction PM₁₀ emissions should be quantified. If emissions would exceed 82 lb/day, the project would have a significant impact on air quality. However, PM₁₀ modeling could be undertaken to verify or dispute this finding per the District's CEQA Air Quality Guidelines.
3. If the project might expose sensitive receptors in adjacent land uses to air quality problems such as odors or toxic air contaminants (e.g., diesel exhaust), the DEIR should include an assessment of these impacts. The impact of prescribed burning on sensitive receptors who would reside in the project area should also be addressed.
4. Mitigation measures should be identified for any significant impacts on air quality. The EIR should quantify the emission reduction effectiveness of each measure, identify agencies responsible for implementation and monitoring, and conclude whether mitigation measures would reduce impacts below significance levels.

5. Project consistency with the 2004 Air Quality Management Plan for the Monterey Bay Region should be addressed. Consistency is used by the District to determine a project's cumulative impact on regional air quality (ozone levels). AMBAG should be contacted for a formal consistency determination, which should be included in the DEIR.
6. In accord with 40 CFR 93.153, please address the General Conformity Rule
7. A model protocol should be developed for the air quality analysis that would be used to assess the impact of the vegetation burns. The analysis should be consistent with the burn plan and should indicate the amount of vegetation to be burned, the burn objectives and the burn prescription. Questions regarding this should be directed to Robert Nunes, Air Quality Planner, at 647-9411 x226.

The District's CEQA Air Quality Guidelines may be used to prepare the air quality analysis. The Guidelines are available on the District's website – www.mbuapcd.org.

Please call if you have any questions or would like assistance.

Sincerely,



Jean Getchell
Supervising Planner
Planning and Air Monitoring Division

cc: Robert Nunes, Planning and Air Monitoring Division



CALIFORNIA STATE UNIVERSITY
Monterey Bay
CAMPUS PLANNING & DEVELOPMENT

100 CAMPUS CENTER, BUILDING 84A
SEASIDE, CA 93955-8001
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WWW.CSUMB.EDU

June 27, 2005



Mr. Steven Endlsey
Fort Ord Reuse Authority
100 12th Street, Building 2880
Marina, CA 93933

Mr. Endlsey,

This letter is in response to FORA's Notice of Preparation (NOP) of an Environmental Impact Report (EIR) for the base wide Habitat Conservation Plan (HCP). The California State University, Monterey Bay (CSUMB), would like to ensure the scope of the EIR and mapping documents reflect CSUMB's recent decision to participate in the HCP. The enclosed NOP HCP Map does not currently indicate our inclusion in the EIR scope.

Thank you for accommodating our recent involvement. We look forward to the completion of the implementation of the HCP.

Sincerely,

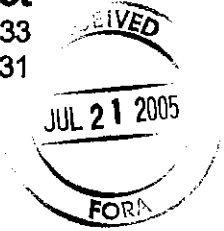
Niraj Dangoria
Associate Vice President
Campus Planning and Operations

cc: John McCutchon
Dan Johnson
Kevin Saunders
Steve Reed
Kathleen Ventimiglia
Mehul Mody
Anya Spear

The California State University



Marina Coast Water District
11 Reservation Road, Marina, Ca 93933
831-384-6131



Fax

To: Steven Endsley **From:** Marc A. Lucca, P.E.

Fax: (831) 883-3675 **Pages:** 5 (including this sheet)

Phone: **Date:** July 21, 2005

Re: Habitat Conservation Plan for Former **CC:**
Fort Ord

Urgent **For Review** **Please Comment** **Please Reply** **Please Recycle**

● **Comments:**

Please call me with any questions 831-582-2665.

Thank You,

Marc A. Lucca, P.E.
Deputy General Manager / District Engineer
Marina Coast Water District

S



MARINA COAST WATER DISTRICT

11 RESERVATION ROAD • MARINA, CA 93933-2099
Home Page: www.mcwd.org
TEL: (831) 384-6131 • FAX: (831) 384-2479

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July 21, 2005

Mr. Steven Endsley
Director of Planning and Finance
Fort Ord Reuse Authority
100 12th Street, Building 2880
Marina, CA 93933

Subject: Habitat Conservation Plan for Former Fort Ord

Dear Mr. Endsley:

Thank you for the opportunity to comment on the Notice of Preparation for the subject document EIR. At the September 30, 2004 meeting of the Coordinated Resource Management and Planning Team, Marina Coast Water District presented a list of its activities including a brief description, and requested that they be included in the Habitat Conservation Plan (HCP). I wanted to take this opportunity to resubmit that list (attached) to you for consideration in the upcoming HCP EIR.

Please contact me if you have any questions.

Sincerely,

Marc A. Lucca, P.E.
Deputy General Manager/District Engineer

Enc. Marina Coast Water District's List of Activities (3 pp)

Marina Coast Water District desires that the following information be included in the Fort Ord Habitat Conservation Plan and that permit coverage be provided for the activities described below.

OPERATIONS & MAINTENANCE ACTIVITIES:

WELL OPERATIONS: Periodically, wells are taken out-of-service for repairs. Repair work may require equipment, e.g., crane, backhoe be mobilized so that the motor, pump, pipe and related appurtenances, valves, and/or electrical equipment can be removed and/or serviced on-site. On-site service can include general cleaning of equipment to include light grease, painting, and mechanical repair, e.g., valve internals. Water may have to be disposed of to purge pipelines and/or well casing. Startup will be done in accordance with CA Department of Health Services requirements.

PIPELINE/SEWER REPAIRS: Typically involves equipment access, e.g., backhoe and trucks for excavation of damaged pipeline, valves and/or concrete structures; and placement of pipe bedding material, piping and pipeline related appurtenances, e.g., valves, air release valves, valve boxes. Sewer repair may require larger equipment to collect and remove sewage that has spilled and/or accumulated on-site. Initiation of service will be done in accordance with CA Department of Health Services requirements.

STORAGE TANKS: Periodically, tanks will be accessed for inspection and/or purposes. This work generally requires complete draining of tanks. Every effort will be made to use that water in the distribution system; however, some water will have to be disposed. The volume of water is dependent upon the tank size and the ability to use the water in the distribution system; however, it can be significant. Water would be disposed on-site. Tank work can include exterior/interior tank preparation and painting; concrete repair work to address spalling and/or cracks in the foundation; replacement or repair of tank appurtenances e.g., air vents, overflow piping, ladders/cages, etc.

Storage tanks are not designed to be operated under pressure. Such an operating condition can result in damage or in the most extreme case, tank failure. Therefore, overflow piping is a provided on each and every tank. While this is not a normal occurrence, tanks will overflow for an unspecified period of time due to a system failure, i.e., a well does not shut off. An alarm is immediately sent to our operations center and action is taken as soon as possible to stop the overflow. This water is typically relieved on-site, but in some cases may be piped to a collection pond, if available.

BOOSTER/LIFT STATIONS: Periodically, booster/lift pumps are taken out-of-service for repairs. Repair work may require equipment, e.g., crane, backhoe be mobilized so that the motor, pump, pipe and related appurtenances, valves, and/or electrical equipment can be removed and/or serviced on-site. On-site service can include general cleaning of equipment to include light grease, painting, and mechanical repair, e.g., valve internals. Water may have to be disposed of to purge pipelines and/or well casing. Startup will be done in accordance with CA Department of Health Services requirements.

FUEL TANK/GENERATOR MAINTENANCE: Routine operations include refueling of storage tanks and general maintenance including replacement of filters, hoses, nozzles, and engine repair. Major service requires that the equipment be taken off-site. In such case, larger equipment would be required to access the site.

SITE MAINTENANCE: This description is for general maintenance activities which includes, but is not limited to, on-site grass cutting, weed abatement/control, sidewalk repair, road repair, storage of equipment, etc...

EMERGENCY PROJECTS: These would include work that is necessary to prevent the catastrophic failure of a facility(s). One such example would be a storage tank that with structural problems that necessitate the tank be taken off-line; however, that tank may not be actively failing.

UNANTICIPATED EVENTS: These would include active or imminent failures of a facility(s) which would cause serious disruption to the system's ability to provide service necessary for the public welfare, health or safety of the community.

CAPITAL IMPROVEMENT PROJECTS (by category)

All construction projects require equipment lay down areas which are used to store equipment necessary for construction. An on-site location is preferred as it reduces traffic otherwise required to enter/egress the site. These locations may be temporarily fenced for safety reasons. The size of the lay down area is dependent upon the size and type of project. In addition, all construction requires large equipment be used during construction such as cranes, backhoes, dump truck, grading equipment, pickup trucks, etc.

STORAGE TANKS Includes the construction and/or demolition of water storage tanks. Work may include clearing, grading, excavation, or placement of soil, concrete foundations, construction of pipelines including system connections, site drainage; and/or tank overflow.

PIPELINES: Includes the installation and/or demolition of pipelines and related appurtenances, e.g., valves, manholes, air release valves, etc. Most times pipes are installed in the streets, but not always. Pipeline construction requires concrete thrust blocks be placed below ground at key joints to prevent pipelines from rupturing. Pipeline installation requires pressure checking and disinfection which requires disposal of water at the completion of the test. These tests follow CA Department of Health Services and/or industry standards to assure the pipelines do not leak.

BOOSTER/LIFT STATIONS: Includes construction and/or demolition of new booster/lift stations. Stations may be buried or above ground, but in all cases will require buried pipelines to connect water or sewer lines into the station. Other work typically required includes construction of concrete foundations, small buildings to house the equipment, buried or above ground conduits/poles for electrical/instrumentation controls.

WELLS: Includes the installation of new well facilities including well, pump, pump house and related appurtenances. Work would also include access of construction equipment necessary to complete the installation, construction of a concrete slab. Repair/rehabilitated wells could require similar work.

DRAFT

DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3101
FAX (805) 549-3329
TDD (805) 549-3259
<http://www.dot.ca.gov/dist05/>



*Flex your power!
Be energy efficient!*

December 23, 2004

Michael A. Houlemard, Executive Officer
Fort Ord Reuse Authority
100 Twelfth Street, Building 2880
Marina, CA 93933

CORRECTED
NAME

Dear Mr. Houlemard:

FORT ORD HABITAT CONSERVATION PLAN

This is in response to your correspondence regarding the Department of Transportation's (Department) participation in the Fort Ord Habitat Conservation Plan (HCP). The Department has reviewed the Draft HCP and recognizes potential benefits associated with participation. However, based on our review of the Draft HCP, we have determined that the investment would far outweigh the benefits gained.

There are relatively few isolated areas within the Department's Highway 1 right of way that could support state or federally listed endangered species and we have no plans for major improvement to the Highway 1 six-lane facility through the Fort Ord area. While planning any future improvements we would strive to avoid areas that supported state and federally listed endangered species. Unavoidable impacts would be addressed through consultation under Section 7 of the Endangered Species Act and Section 2080.1 of the California Fish and Game Code. In addition, the Department's environmental planning staff currently works closely with the maintenance staff to identify sensitive areas that must be avoided during routine maintenance activities.

The Department believes that our current practices allow for the protection of endangered species within the existing Highway 1 right of way and that unavoidable endangered species impacts associated with any future projects will be adequately covered by the existing Section 7 and Section 2080.1 consultation processes. Therefore the extensive reporting and monitoring requirements of the HCP exceed any potential benefit from participation in the HCP.

We continue to support the proposed transfer of the Highway 1 easement through Fort Ord from the Army as identified in the Fort Ord Habitat Management Plan (HMP). As a signatory to the HMP the Department agreed to preserve existing patches of native coastal strand, dune scrub, and sand hill maritime chaparral habitat in the road shoulders and median areas that will not conflict with anticipated highway expansion,

Michael A. Houlemard

December 23, 2004

Page 2

improvements, operations or maintenance. To date the Department has contributed \$250,000 for the removal of "hardstand" areas in and around the proposed Highway 68 corridor as habitat restoration on Fort Ord lands, and \$20,000 to the Department of Parks and Recreation for habitat restoration on State parkland adjacent to Highway 1.

Our maintenance staff has also worked to enhance native habitat within the Highway 1 right of way through the control of invasive vegetation. This effort has been hampered by not only the required statewide reduction in the use of herbicides, but by substantial reductions in our maintenance staff due to the State's budget crisis. However, the Department remains committed to meeting the requirements of the Habitat Management Plan.

Thank you for requesting the Department's participation in the Fort Ord HCP. While we must decline participation in the HCP, we look forward to the transfer of portions of the Highway 1 corridor from the Army to the Department and we will strive to implement the conditions of the HMP, within the Department's fiscal resources. If you have any questions or concerns, please contact David Murray at (805) 549-3168.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Gregg Albright", is written over a horizontal line. The signature is stylized and somewhat cursive.

R. GREGG ALBRIGHT
District Director

Michael Houlemard

From: Eric_Morgan@ca.blm.gov
Sent: Wednesday, April 13, 2005 3:36 PM
To: Michael Zander
Cc: 'Michael Houlemard'; 'Steve Endsley'; rbeehler@ca.blm.gov; George_Hill@ca.blm.gov
Subject: Fort Ord HCP Comments (electronic version)



BLM_2004_HC
'_Comments.do

HARDCOPY TO FOLLOW

April 12, 2005

CA-190.50
1600

Mike Houlemard
Executive Officer of Fort Ord Reuse Authority (FORA)
100 12th Street, Building 2880
Marina, CA 93933

The Bureau of Land Management (BLM) appreciates the collective effort that has gone into the preparation of the September 2004 Draft of the Fort Ord Habitat Conservation Plan (HCP). The document represents several years of coordination between the Fort Ord Reuse Authority and the primary habitat managers located on the former Fort Ord, as well as the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDF&G). As you know, the HCP does not, in of itself, facilitate any Section 7 compliance that BLM is obligated to undertake for lands under its jurisdiction at the former Fort Ord. Endangered Species Act (ESA) compliance by the BLM will likely be facilitated through a separate document, such as our ongoing plan amendment to our Hollister Field Office's Resource Management Plan, and completion of our current interim Section 7 Consultation process. We have assisted the community with this HCP planning effort because we are interested in facilitating the reuse process for the former Fort Ord, and ensuring that the natural environment is given proper consideration.

Our review of the Draft HCP has yielded the attached comments that have been prompted, in part, by requirements of the USFWS and CDF&G to facilitate state and Federal ESA compliance for non-Federal land recipients. Most of our comments, or portions thereof, have been the result of years of coordination through the Fort Ord Coordinated Resources Management Planning group (Fort Ord CRMP) at the former Fort Ord. Your agency's leadership with this group and the coordinated planning effort has been greatly appreciated. Most of the attached comments have already been coordinated with the members of the Fort Ord CRMP and should logically find a place into the revised/final HCP.

One of the primary strengths of the HCP comments that we provide is that they better describe our agency's habitat management and enhancement responsibilities such that the USFWS and CDF&G can proceed with state and Federal ESA processes. Because the BLM lands at the former Fort Ord are being used as part of the overall habitat mitigation strategy that contain provisions for "take", those regulatory agencies have required more

Specificity on what our agency obligations would be.

In short, our habitat enhancement requirements are compensating for "take" above and beyond those of our own actions and management practices. This has led to some management requirements of our agency that are normally considered above and beyond our typical management programs. Your agency has been very understanding of this dilemma and has supported strategies that relieve the BLM of some rather costly responsibilities such as biological monitoring.

What is lacking in this comment letter is our agency's response to the issue of funding assurances. In the weeks to come, we will be completing a table that specifies: 1) what our HCP obligations will be; 2) what the estimated costs of those obligations are; and 3) how those obligations will be achieved. We will need to coordinate our cost estimates with those that you are having developed by the Center for Natural Lands Management for non-Federal land recipients - and we encourage your further consideration of cooperative arrangements for obligations that are common to multiple parties within the HCP.

Should you have any questions regarding these comments, feel free to contact me or my Fort Ord Project Manager, Eric Morgan, at (831)394-8314.

Sincerely,

Robert Beehler
Hollister Field Manager

Cc: Mike Zander, Zander Associates
Fort Ord CRMP, HCP Working Group

Enclosure: September 2004, Draft HCP Comments (10 pages)

(See attached file: BLM_2004_HCP_Comments.doc)

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Appendix B

Special Status Species Materials

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Table B-1: Special-Status Species Table

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
MAMMALS			
<i>Antrozous pallidus</i> Pallid bat	-- / SSC / --	A wide variety of habitats are utilized including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Most common in open, dry habitats with rocky areas for roosting. Also relatively common on bridges.	High: Potential habitat occurs within the Plan Area.
<i>Eumops perotis californicus</i> California mastiff bat	-- / SSC / --	Lowland areas in arid to semi-arid habitats including deciduous woodlands, coastal scrub, and annual grasslands	High: Potential habitat occurs within the Plan Area.
<i>Lasiurus cinereus</i> Hoary bat	-- / CNDDDB / --	Prefers open habitats or habitat mosaics with access to trees for cover and open areas or edge for feeding. Generally roost in dense foliage of trees.	High: Potential habitat occurs within the Plan Area.
<i>Corynorhinus townsendii</i> Townsend's big eared bat	-- / SSC / --	Scrub deserts, pine and pinon-juniper forests, oak bay woodlands, and mixed broadleaf conifer woodlands; requires access to caves, mines, building attics, or other dark cavities for daytime roosting.	High: Potential habitat occurs within the Plan Area.
<i>Neotoma macrotis luciana</i> Monterey dusky-footed woodrat	-- / SSC / --	Forest and oak woodland habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats.	Known: This species has been observed within the Plan Area.
<i>Reithrodontomys megalotis distichlis</i> Salinas harvest mouse	-- / CNDDDB / --	Known only to occur from the Monterey Bay region. Occurs in fresh and brackish water wetlands, and probably in the adjacent uplands around the mouth of the Salinas River.	Moderate: Three CNDDDB occurrences of this species are recorded in the vicinity of the Plan Area near Seaside Marina, and Armstrong Ranch. Suitable habitat is present within and surrounding emergent wetland areas in the Plan Area.
<i>Sorex ornatus salarius*</i> Monterey ornate shrew	-- / SSC / --	Mostly moist or riparian woodland habitats, and within chaparral, grassland, and emergent wetland habitats where there is a thick duff or downed logs.	Known: This species has been observed within the Plan Area.
<i>Taxidea taxus</i> American badger	-- / SSC / --	Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds.	Known: This species has been observed within the Plan Area.
BIRDS			
<i>Accipiter cooperii</i> Cooper's hawk	-- / SSC / --	Nesting habitat includes riparian deciduous, coast live oak, or conifers; forages in open woodlands.	Known: This species has been observed within the Plan Area.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Agelaius tricolor</i> Tricolored blackbird	-- / SC - SSC / --	Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats.	Known: The CNDDDB reports occurrences within the Plan Area.
<i>Aquila chrysaetos</i> Golden eagle	-- / SFP / --	Nests in cliffs and large oaks; forages in annual grasslands, chaparral and oak woodlands with abundant medium-sized and large mammals for prey	Known: This species has been observed within the Plan Area.
<i>Asio flammeus</i> Short-eared owl	-- / SSC / --	Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, meadows, dunes, irrigated lands, and saline and freshwater emergent marshes. Dense vegetation is required for roosting and nesting cover. This includes tall grasses, brush, ditches, and wetlands. Open, treeless areas containing elevated sites for perching, such as fence posts or small mounds, are also needed. Some individuals breed in northern California.	Moderate: This species does not breed within Monterey County; however, suitable habitat occurs in the Plan Area.
<i>Athene cunicularia</i> Burrowing owl	-- / SSC / --	Year round resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Frequent open grasslands and shrublands with perches and burrows. Use rodent burrows (often California ground squirrel) for roosting and nesting cover. Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available.	Known: One CNDDDB occurrence of this species is recorded within the Plan Area.
<i>Buteo regalis</i> Ferruginous hawk	-- / CNDDDB / --	An uncommon winter resident and migrant at lower elevations and open grasslands in the Modoc Plateau, Central Valley, and Coast Ranges and a fairly common winter resident of grassland and agricultural areas in southwestern California. Frequent open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Does not breed in California.	Low: A CNDDDB occurrence of this species is recorded in the vicinity. However, this species does not breed in California.
<i>Buteo swainsoni</i> Swainson's hawk	-- / ST / --	Generally found associate with plains, range, open hills, and sparse trees.	Unlikely: The nearest CNDDDB occurrence is a historic occurrence from 1915 approximately four miles from the Plan Area. No nesting pairs have been seen in Salinas Valley since the 1930s.
<i>Charadrius nivosus ssp. nivosus</i> Western snowy plover	FT / SSC / --	Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting.	Known: This species has been observed within the Plan Area.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Cypseloides niger</i> Black swift	-- / SSC / --	Regularly nests in moist crevices or caves on sea cliffs above the surf, or on cliffs behind or adjacent to waterfalls in deep canyons. Forages widely over many habitats.	Unlikely: The nearest CNDDDB occurrence is approximately five miles from the Plan Area and the FODSP contains low quality habitat.
<i>Elanus leucurus</i> White-tailed kite	-- / SFP / --	Open groves, river valleys, marshes, and grasslands. Prefer such area with low roosts (fences etc.). Nest in shrubs and trees adjacent to grasslands.	Known: This species has been observed within the Plan Area.
<i>Eremophila alpestris actia</i> California horned lark	-- / CNDDDB / --	Variety of open habitats, usually where large trees and/or shrubs are absent. Found from grasslands along the coast to deserts at sea-level and alpine dwarf-shrub habitats are higher elevations. Builds open cup-like nests on the ground.	Known: This species has been observed within the Plan Area.
<i>Falco mexicanus</i> Prairie falcon	-- / CNDDDB / --	Associated primarily with perennial grasslands, savannahs, rangeland, some agricultural fields, and desert scrub areas. Uses open terrain for foraging; nests in open terrain with canyons, cliffs, escarpments, and rock outcrops.	Moderate: May forage and nest within Plan Area. The nearest CNDDDB occurrence is within the Spreckels Quad (exact occurrence location information not available).
<i>Falco peregrinus antum</i> American peregrine falcon	-- / SFP / --	Forages for other birds over a variety of habitats. Breeds primarily on rocky cliffs.	Unlikely: The nearest CNDDDB occurrence is a general occurrence in the vicinity of Elkhorn Slough, approximately 4 miles from the Plan Area. No suitable nesting habitat present within the Plan Area.
<i>Lanius ludovicianus</i> Loggerhead shrike	-- / SSC / --	Residents of lowlands and foothills. Prefers open habitats with scattered shrubs, trees, fences, or other lookout posts for foraging. Nests in shrubs and trees adjacent to foraging habitat.	Known: This species has been observed within the Plan Area.
<i>Laterallus jamaicensis coturniculus</i> California black rail	-- / ST-SFP / --	Inhabits freshwater marshes, wet meadows & shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate during the year & dense vegetation for nesting habitat.	Unlikely: The nearest CNDDDB occurrence is approximately 5 miles from the Plan Area. No suitable nesting habitat present within the Plan Area.
<i>Pelecanus occidentalis californicus</i> California brown pelican	-- / SFP / --	Coastal bluffs, estuaries, offshore islands and nearshore ocean.	Known: This species has been observed within the Plan Area.
<i>Oceanodroma homochroa</i> Ashy storm-petrel	-- / SSC / --	Tied to land only to nest, otherwise remains over open sea. Nests in natural cavities, sea caves, or rock crevices on offshore islands and prominent peninsulas of the mainland.	Unlikely: The nearest CNDDDB occurrence is approximately 14 miles from the Plan Area and no suitable nesting habitat present within the Plan Area.
<i>Rallus obsoletus obsoletus</i> California Ridgway's rail	FE / SE-SFP / --	Occur within a range of salt and brackish marshes.	Unlikely: No suitable habitat occurs within the Plan Area.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Riparia riparia</i> Bank swallow	-- / ST / --	Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes.	Known: An occurrence of this species was reported by California State Parks in 2008 within the FODSP.
<i>Vireo bellii pusillus</i> Least Bell's vireo	FE / SE / --	Riparian areas and drainages. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.	Unlikely: Marginal habitat is present within the Plan Area. This species is considered virtually extirpated as a nester in Monterey County. The nearest CNDDDB occurrence is from 2001, approximately 12 miles from the Plan Area.
REPTILES AND AMPHIBIANS			
<i>Actinemys marmorata</i> Western pond turtle	-- / SSC / --	Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks.	High: Suitable habitat is present within the Plan Area.
<i>Ambystoma californiense</i> California tiger salamander	FT / ST / --	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.	Known: This species has been observed within the Plan Area.
<i>Ambystoma macrodactylum croceum</i> Santa Cruz long-toed salamander	FE / SE-SFP / --	Preferred habitats include ponderosa pine, montane hardwood-conifer, mixed conifer, montane riparian, red fir, and wet meadows. This is an isolated subspecies which occurs in a small number of localities in Santa Cruz and Monterey Counties. Adults spend the majority of the time in underground burrows and beneath objects. Larvae prefer shallow water with clumps of vegetation.	Unlikely: This species is not known to occur in the Plan Area and the Plan Area is likely outside its range.
<i>Anniella pulchra</i> Northern California legless lizard	-- / SSC / --	Requires moist, warm habitats with loose soil for burrowing and prostrate plant cover, often forages in leaf litter at plant bases; may be found on beaches, sandy washes, and in woodland, chaparral, and riparian areas.	Known: This species has been observed within the Plan Area. There is a CNDDDB occurrence from 1997 in FONR HMA area.
<i>Phrynosoma blainvillii</i> Coast horned lizard	-- / SSC / --	Associated with open patches of sandy soils in washes, chaparral, scrub, and grasslands.	Known: This species has been observed within the Plan Area.
<i>Rana boylei</i> Foothill yellow-legged frog	-- / SSC / --	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, including hardwood, pine, and riparian forests, scrub, chaparral, and wet meadows. Rarely encountered far from permanent water.	Unlikely: No suitable habitat present within the Plan Area. The nearest CNDDDB occurrence is approximately 16 miles from the Plan Area.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Rana draytonii</i> California red-legged frog	FT / SSC / --	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	Known: This species has been identified in Pond 998 South (Toro Pond).
<i>Taricha torosa torosa</i> Coast Range newt (Monterey County south only)	-- / SSC / --	Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoir.	Known: This species has been observed within the Plan Area.
<i>Thamnophis hammondi</i> Two-striped garter snake	-- / SSC / --	Associated with permanent or semi-permanent bodies of water bordered by dense vegetation in a variety of habitats from sea level to 2400m elevation.	High: Suitable habitat is present within the Plan Area.
FISH			
<i>Eucyclogobius newberryi</i> Tidewater goby	FE / SSC / --	Brackish water habitats, found in shallow lagoons and lower stream reaches.	Unlikely: No suitable habitat present within the Plan Area.
<i>Oncorhynchus mykiss irideus</i> South-central coast steelhead	FT / SSC / --	Coastal perennial and near perennial streams, with suitable spawning and rearing habitat and no major barriers.	Unlikely: No suitable habitat present within the Plan Area.
<i>Spirinchus thaleichthys</i> Longfin smelt	-- / ST / --	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefers salinities of 15-30 PPT, but can be found in completely freshwater to almost pure seawater.	Unlikely: No suitable habitat present within the Plan Area.
INVERTEBRATES			
<i>Bombus caliginosus</i> Obscure bumble bee	-- / CNDDDB / --	Native to the West Coast of the United States. Occurs primarily along the coast in grassy prairies and meadows within the Coast Range. This species can nest both under and above ground. When nesting above ground, the species may utilize abandoned bird nests. Found in areas that are relatively humid including areas that are frequently foggy.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present. The nearest CNDDDB occurrence is approximately 15 miles from the Plan Area.
<i>Bombus occidentalis</i> Western bumble bee	-- / CNDDDB / --	Occurs in open grassy areas, urban parks, urban gardens, chaparral, and meadows. This species generally nest underground.	High: Suitable habitat is present within the Plan Area. The nearest CNDDDB occurrence is approximately 1.3 miles from the Plan Area.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Coelus globosus</i> Globose dune beetle	-- / CNDDDB / --	Coastal dunes. These beetles are primarily subterranean, tunneling through sand underneath dune vegetation.	Unlikely: Suitable habitat is present within the foredune habitat at FODSP and a CNDDDB occurrence is near the Highway 1 Fremont Street Exit in Seaside. However, this species is restricted to the foredunes within 100 feet of the wave wash zone. It has not been collected from Monterey beaches for many years, and may have been extirpated in the Project vicinity (Doyen, 1976).
<i>Danaus plexippus</i> Monarch butterfly	-- / CNDDDB / --	Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine, and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well.	Unlikely: Suitable habitat does not occur in the Plan Area and overwintering sites have not been observed within the Plan Area.
<i>Euphilotes enoptes smithi</i> Smith's blue butterfly	FE / -- / --	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are <i>Eriogonum latifolium</i> and <i>E. parvifolium</i> .	Known: This species has been observed within the Plan Area.
<i>Euphydryas editha bayensis</i> Bay checkerspot butterfly	FT / -- / --	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of the San Francisco Bay. <i>Plantago erecta</i> is the primary host plant; <i>Orthocarpus densiflorus</i> and <i>O. purpurascens</i> are secondary host plants.	Unlikely: No suitable habitat present within Plan Area and the Plan Area is out of the currently known range for this species. The nearest CNDDDB occurrence is approximately 15 miles from the Plan Area.
<i>Helminthoglypta sequoicola consors</i> Redwood shoulderband snail	-- / CNDDDB / --	Known only from the south slope of San Juan grade, near foot, 8 miles northwest of Salinas.	Unlikely: No suitable habitat present within Plan Area and the Plan Area is out of the currently known range for this species.
<i>Linderiella occidentalis</i> California linderiella	-- / CNDDDB / --	Ephemeral ponds with no flow. Generally associated with hardpans.	Known: This species has been observed within the Plan Area.
<i>Optioservus canus</i> Pinnacles optioservus riffle beetle	-- / CNDDDB / --	Species of this genus generally prefer gravelly or rocky streams and some often occur on moss covered rocks. Both adults and larvae crawl on rocks and gravel mostly in riffle areas.	Unlikely: No suitable habitat present within the Plan Area. The nearest CNDDDB occurrence is approximately 17 miles from the Plan Area.
<i>Tryonia imitator</i> California brackishwater snail	-- / CNDDDB / --	Inhabits coastal lagoons, estuaries and salt marshes. Found only in permanently submerged areas in a variety of sediment types. Tolerant of a wide range of salinities.	Unlikely: No suitable habitat present within Plan Area. The nearest CNDDDB occurrence is approximately 3.5 miles from the Project Site within Elkhorn Slough.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
PLANTS			
<i>Agrostis lacuna-vernalis</i> Vernal pool bent grass	-- / -- / 1B	Vernal pool mima mounds at elevations of 115-145 meters. Annual herb in the Poaceae family; blooms April-May. Known only from Butterfly Valley and Machine Gun Flats of Ft. Ord National Monument.	Known: This species has been observed within the Plan Area.
<i>Allium hickmanii</i> Hickman's onion	-- / -- / 1B	Closed-cone coniferous forests, maritime chaparral, coastal prairie, coastal scrub, and valley and foothill grasslands at elevations of 5-200 meters. Bulbiferous herb in the Alliaceae family; blooms March-May.	Known: This species has been observed within the Plan Area.
<i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i> Hooker's manzanita	-- / -- / 1B	Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 85-536 meters. Evergreen shrub in the Ericaceae family; blooms January-June.	Known: This species has been observed within the Plan Area.
<i>Arctostaphylos montereyensis</i> Toro manzanita	-- / -- / 1B	Maritime chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 30-730 meters. Evergreen shrub in the Ericaceae family; blooms February-March.	Known: This species has been observed within the Plan Area.
<i>Arctostaphylos pajaroensis</i> Pajaro manzanita	-- / -- / 1B	Chaparral on sandy soils at elevations of 30-760 meters. Evergreen shrub in the Ericaceae family; blooms December-March.	Known: This species has been observed within the Plan Area.
<i>Arctostaphylos pumila</i> Sandmat manzanita	-- / -- / 1B	Closed-cone coniferous forests, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 3-205 meters. Evergreen shrub in the Ericaceae family; blooms February-May.	Known: This species has been observed within the Plan Area.
<i>Arctostaphylos edmundsii</i> Little Sur manzanita	-- / -- / 1B	Coastal bluff scrub and chaparral on sandy soils at elevations of 30-105 meters. Evergreen shrub in the Ericaceae family; blooms November-April.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present. The nearest CNDDDB occurrence is approximately 12 miles from the Plan Area.
<i>Astragalus tener</i> var. <i>tener</i> Alkali milk-vetch	-- / -- / 1B	Playas, valley and foothill grassland on adobe clay, and vernal pools on alkaline soils at elevations of 1-60 meters. Annual herb in the Fabaceae family; blooms March-June.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Astragalus tener</i> var. <i>titi</i> Coastal dunes milk-vetch	FE / SE / 1B	Coastal bluff scrub on sandy soils, coastal dunes, and mesic areas of coastal prairie at elevations of 1-50 meters. Annual herb in the Fabaceae family; blooms March-May.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Bryoria spiralifera</i> Twisted horsehair lichen	-- / -- / 1B	California North Coast coniferous forest at elevations of 0–30 meters. Often found on conifers, including <i>Picea sitchensis</i> , <i>Pinus contorta</i> var. <i>contorta</i> , <i>Pseudotsuga menziesii</i> , <i>Abies grandis</i> , and <i>Tsuga heterophylla</i> . Fruticose lichen in the Parmeliaceae family.	Unlikely: No suitable habitat present within Plan Area. The only CNDDDB occurrence in the region is approximately 7 miles from the Plan Area
<i>California macrophylla</i> Round-leaved filaree	-- / -- / 1B	Cismontane woodland and valley and foothill grassland on clay soils at elevations of 15-1200 meters. Annual herb in the Geraniaceae family; blooms March-May.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present. The nearest CNDDDB occurrence is approximately 13 miles from the Plan Area
<i>Castilleja ambigua</i> var. <i>insalutata</i> Pink Johnny-nip	-- / -- / 1B	Coastal prairie and coastal scrub at elevations of 0-100 meters. Annual herb in the Orobanchaceae family; blooms May-August.	Known: This species has been observed within the Plan Area.
<i>Ceanothus rigidus</i> Monterey ceanothus	-- / -- / 4	Closed cone coniferous forest, chaparral, and coastal scrub on sandy soils at elevations of 3-200 meters. Evergreen shrub in the Rhamnaceae family, blooms February-April.	Known: This species has been observed within the Plan Area.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	-- / -- / 1B	Valley and foothill grassland on alkaline soils at elevations of 1-230 meters. Annual herb in the Asteraceae family; blooms June-November.	Known: This species has been observed within the Plan Area.
<i>Chorizanthe minutiflora</i> Fort Ord spineflower	-- / -- / 1B	Found on Fort Ord, Monterey County, California in an isolated coastal scrub community. Only known occurrences on Fort Ord National Monument.	Known: This species has been observed within the Plan Area.
<i>Chorizanthe pungens</i> var. <i>pungens</i> Monterey spineflower	FT / -- / 1B	Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland on sandy soils at elevations of 3-450 meters. Annual herb in the Polygonaceae family; blooms April-June.	Known: This species has been observed within the Plan Area.
<i>Chorizanthe robusta</i> var. <i>robusta</i> Robust spineflower	FE / -- / 1B	Openings in cismontane woodland, coastal dunes, and coastal scrub on sandy or gravelly soils at elevations of 3-300 meters. Annual herb in the Polygonaceae family; blooms April-September.	Known: This species has been observed within the Plan Area.
<i>Clarkia jolonensis</i> Jolon clarkia	-- / -- / 1B	Cismontane woodland, chaparral, riparian woodland, and coastal scrub at elevations of 20-660 meters. Annual herb in the Onagraceae family; blooms April-June.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Collinsia multicolor</i> San Francisco collinsia	-- / -- / 1B	Closed-cone coniferous forest and coastal scrub, sometimes on serpentinite soils, at elevations of 30-250 meters. Annual herb in the Scrophulariaceae family; blooms March-May.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i> Seaside bird's-beak	-- / SE / 1B	Closed-cone coniferous forests, chaparral, cismontane woodlands, coastal dunes, and coastal scrub on sandy soils, often on disturbed sites, at elevations of 0-425 meters. Hemi-parasitic, annual herb in the Scrophulariaceae family; blooms April-October.	Known: This species has been observed within the Plan Area.
<i>Delphinium californicum</i> ssp. <i>interius</i> Hospital Canyon larkspur	-- / -- / 1B	Openings in chaparral, coastal scrub, and mesic areas of cismontane woodland at elevations of 230-1095 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present. The nearest CNDDDB occurrence is approximately 3 miles from the Plan Area.
<i>Delphinium hutchinsoniae</i> Hutchinson's larkspur	-- / -- / 1B	Broadleaved upland forest, chaparral, coastal scrub, and coastal prairie at elevations of 0-427 meters. Perennial herb in the Ranunculaceae family; blooms March-June.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Delphinium umbracolorum</i> umbrella larkspur	-- / -- / 1B	Cismontane woodland at elevations of 400-1600 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	Unlikely: No suitable habitat present within Plan Area. The nearest CNDDDB occurrence is approximately 4.5 miles from the Plan Area.
<i>Ericameria fasciculata</i> Eastwood's goldenbush (Eastwood's ericameria)	-- / -- / 1B	Closed-cone coniferous forest, maritime chaparral, coastal dunes, and openings in coastal scrub on sandy soils at elevations of 30-275 meters. Evergreen shrub in the Asteraceae family; blooms July-October.	Known: This species has been observed within the Plan Area.
<i>Eriogonum nortonii</i> Pinnacles buckwheat	-- / -- / 1B	Cismontane woodland at elevations of 400-1600 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	Unlikely: No suitable habitat present within Plan Area. The nearest CNDDDB occurrence is approximately 4 miles from the Plan Area.
<i>Erysimum ammophilum</i> Sand-loving (coast) wallflower	-- / -- / 1B	Maritime chaparral, coastal dunes, and openings in coastal scrub on sandy soils at elevations of 0-60 meters. Perennial herb in the Brassicaceae family; blooms February-June.	Known: This species has been observed within the Plan Area.
<i>Erysimum menziesii</i> ssp. <i>menziesii</i> Menzies' wallflower	FE / SE / 1B	Coastal dunes at elevations of 0-35 meters. Perennial herb in the Brassicaceae family; blooms March-June.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Erysimum menziesii</i> ssp. <i>yadonii</i> Yadon's wallflower	FE / SE / 1B	Coastal dunes at elevations of 0-10 meters. Perennial herb in the Brassicaceae family; blooms May-September.	Known: This species has been observed within the Plan Area.
<i>Fritillaria liliacea</i> Fragrant fritillaria	-- / -- / 1B	Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often serpentinite, at elevations of 3-410 meters. Bulbiferous perennial herb in the Liliaceae family; blooms February-April.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Gilia tenuiflora</i> ssp. <i>arenaria</i> Sand gilia	FE / ST / 1B	Maritime chaparral, cismontane woodland, coastal dunes, and openings in coastal scrub on sandy soils at elevations of 0-45 meters. Annual herb in the Polemoniaceae family; blooms April-June.	Known: This species has been observed within the Plan Area.
<i>Hesperocyparis goveniana</i> ssp. <i>goveniana</i> Gowen cypress	FT / -- / 1B	Closed-cone coniferous forest and maritime chaparral at elevations of 30-300 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Point Lobos near Gibson Creek and the Huckleberry Hill Nature Preserve near Highway 68.	Unlikely: This species is not documented to occur within the Plan Area. The Plan Area is outside of currently known range for this species.
<i>Hesperocyparis macrocarpa</i> Monterey cypress	-- / -- / 1B	Closed-cone coniferous forest at elevations of 10-30 meters. Evergreen tree in the Cupressaceae family. Natively occurring only at Cypress Point in Pebble Beach and Point Lobos State Park; widely planted and naturalized elsewhere.	Unlikely: The Plan Area is outside of currently known range for this species. Although Monterey cypress occurs within the Plan Area, these individuals are planted specimens or volunteers from planted specimens and are not considered special-status. Therefore, no natively occurring Monterey cypress trees are present within the Plan Area.
<i>Holocarpha macradenia</i> Santa Cruz tarplant	FT / SE / 1B	Coastal prairies and valley foothill grasslands, often clay or sandy soils, at elevations of 10-220 meters. Annual herb in the Asteraceae family; blooms June-October.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Horkelia cuneata</i> ssp. <i>sericea</i> Kellogg's horkelia	-- / -- / 1B	Closed-cone coniferous forests, maritime chaparral, and openings in coastal scrub on sandy or gravelly soils at elevations of 10-200 meters. Perennial herb in the Rosaceae family; blooms April-September.	Known: This species has been observed within the Plan Area.
<i>Horkelia marinensis</i> Point Reyes horkelia	-- / -- / 1B	Coastal dunes, coastal prairie, and coastal scrub on sandy soils at elevations of 5-350 meters. Perennial herb in the Rosaceae family; blooms May-September.	High: Suitable habitat is present within the Plan Area. The nearest CNDDDB occurrence is approximately 0.1 miles from the Plan Area.
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE / -- / 1B	Mesic areas of valley and foothill grassland, alkaline playas, cismontane woodland, and vernal pools at elevations of 0-470 meters. Annual herb in the Asteraceae family; blooms March-June.	Known: This species has been observed within the Plan Area.
<i>Layia carnosa</i> Beach layia	FE / SE / 1B	Coastal dunes and coastal scrub on sandy soils at elevations of 0-60 meters. Annual herb in the Asteraceae family; blooms March-July.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Legenere limosa</i> Legenere	-- / -- / 1B	Vernal pools and wetlands at elevations of 1-880 meters. Annual herb in the Campanulaceae family; blooms April-June.	Known: This species has been observed within the Plan Area.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Lupinus tidestromii</i> Tidestrom's lupine	FE / SE / 1B	Coastal dunes at elevations of 0-100 meters. Perennial rhizomatous herb in the Fabaceae family; blooms April-June. Only Monterey County plants are state-listed Endangered as var. <i>tidestromii</i> .	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Malacothamnus palmeri</i> var. <i>involutocratus</i> Carmel Valley bush-mallow	-- / -- / 1B	Chaparral, cismontane woodland, and coastal scrub at elevations of 30-1100 meters. Deciduous shrub in the Malvaceae family; blooms May-August.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Malacothamnus palmeri</i> var. <i>palmeri</i> Santa Lucia bush-mallow	-- / -- / 1B	Chaparral on rocky soils at elevations of 60-360 meters. Deciduous shrub in the Malvaceae family; blooms May-July.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Malacothrix saxatilis</i> var. <i>arachnoidea</i> Carmel Valley malacothrix	-- / -- / 1B	Chaparral and coastal scrub on rocky soils at elevations of 25-1036 meters. Perennial rhizomatous herb in the Asteraceae family; blooms June-December (uncommon in March).	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Meconella oregana</i> Oregon meconella	-- / -- / 1B	Coastal prairie and coastal scrub at elevations of 250-620 meters. Annual herb in the Papaveraceae Family; blooms March-April.	Known: This species has been observed within the Plan Area.
<i>Microseris paludosa</i> Marsh microseris	-- / -- / 1B	Closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grasslands at elevations of 3-300 meters. Perennial herb in the Asteraceae family; blooms April-June (July).	Known: This species has been observed within the Plan Area.
<i>Monardella sinuata</i> ssp. <i>nigrescens</i> Northern curly-leaved monardella	-- / -- / 1B	Chaparral, coastal dunes, coastal scrub, and lower montane coniferous forest (ponderosa pine sandhills) on sandy soils at elevations of 0-300 meters. Annual herb in the Lamiaceae family; blooms April-September.	Known: This species has been observed within the Plan Area.
<i>Monolopia gracilens</i> Woodland woollythreads	-- / -- / 1B	Chenopod scrub, valley and foothill grassland on sandy soils at elevations of 60-800 meters. Annual herb in the Asteraceae family; blooms February-May	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present. The nearest CNDDDB occurrence is approximately 2.5 miles from the Plan Area
<i>Pinus radiata</i> Monterey pine	-- / -- / 1B	Closed-cone coniferous forest at elevations of 25-185 meters. Evergreen tree in the Pinaceae family. Only three native stands in CA, at Ano Nuevo, Cambria, and the Monterey Peninsula; introduced in many areas.	Unlikely: The Plan Area is outside of currently known range for this species. Although Monterey pine occurs within the Plan Area, these individuals are planted specimens or volunteers from planted specimens and are not considered special-status. Therefore, no natively occurring Monterey cypress trees are present within the Plan Area.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Piperia yadonii</i> Yadon's rein orchid	FE / -- / 1B	Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. Annual herb in the Orchidaceae family; blooms May-August.	Known: This species has been observed within the Plan Area.
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i> Choris' popcornflower	-- / -- / 1B	Mesic areas of chaparral, coastal prairie, and coastal scrub at elevations of 15-160 meters. Annual herb in the Boraginaceae family; blooms March-June.	Known: This species has been observed within the Plan Area. There are two CNDDDB occurrences within the Plan Area.
<i>Plagiobothrys diffusus</i> San Francisco popcornflower	-- / SE / 1B	Coastal prairie and valley and foothill grassland at elevations of 60-360 meters. Annual herb in the Boraginaceae family; blooms March-June.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present. The nearest CNDDDB occurrence is approximately 23 miles from the Plan Area.
<i>Plagiobothrys uncinatus</i> Hooked popcornflower	-- / -- / 1B	Riparian woodland, chaparral, and cismontane woodland along intermittent streams at elevations of 300-630 meters. Annual herb in the Lamiaceae family; blooms April-July.	Unlikely: No suitable habitat present within Plan Area. The nearest CNDDDB occurrence is approximately 10 miles from the Plan Area.
<i>Potentilla hickmanii</i> Hickman's cinquefoil	FE / SE / 1B	Coastal bluff scrub, closed-cone coniferous forests, vernal mesic meadows, and freshwater marshes and swamps at elevations of 10-149 meters. Perennial herb in the Rosaceae family; blooms April-August.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.
<i>Ramalina thrausta</i> Angel's hair lichen	-- / -- / 2B	North coast coniferous forest on dead twigs and other lichens. Epiphytic fructose lichen in the Ramalinaceae family. In northern CA it is usually found on dead twigs, and has been found on <i>Alnus rubra</i> , <i>Calocedrus decurrens</i> , <i>Pseudotsuga menziesii</i> , <i>Quercus garryana</i> , and <i>Rubus spectabilis</i> . In Sonoma County it grows on and among dangling mats of <i>R. menziesii</i> and <i>Usnea</i> spp.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present. The nearest CNDDDB occurrence is approximately 5 miles from the Plan Area.
<i>Rosa pinetorum</i> Pine rose	-- / -- / 1B	Closed-cone coniferous forest at elevations of 2-300 meters. Shrub in the Rosaceae family; blooms May-July. Possible hybrid of <i>R. spithamea</i> , <i>R. gymnocarpa</i> , or others; further study needed.	Unlikely: This species is not documented to occur within the Plan Area. Plan area does not contain suitable habitat.
<i>Stebbinsoseris decipiens</i> Santa Cruz microseris	-- / -- / 1B	Broadleaved upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and openings in valley and foothill grassland, sometimes on serpentinite, at elevations of 10-500 meters. Annual herb in the Asteraceae family; blooms April-May.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present.

Species	Status (USFWS/ CDFW/ CNPS)	General Habitat	Potential Occurrence within Plan Area
<i>Sidalcea malachroides</i> Maple-leaved checkerbloom	-- / -- / 4	Broadleaved upland forest, coastal prairie, coastal scrub, North Coast coniferous forest, and riparian woodlands, often in disturbed areas, at elevations of 2-730 meters. Perennial herb in the Malvaceae family; blooms March-August.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present. The nearest CNDDDB occurrence is approximately 4 miles from the Plan Area.
<i>Tortula californica</i> California screw moss	-- / -- / 1B	Valley and foothill grassland and chenopod scrub on sandy soils at elevations of 10-1460 meters. Moss in the Pottiaceae family.	Low: This species is not documented to occur within the Plan Area; suitable habitat within the Plan Area is present. The only CNDDDB occurrence in the region is approximately 11 miles from the Plan Area.
<i>Trifolium buckwestiorum</i> Santa Cruz clover	-- / -- / 1B	Broadleaved upland forest, cismontane woodland, and margins of coastal prairie on gravelly soils at elevations of 105-610 meters. Annual herb in the Fabaceae family; blooms April-October.	Known: This species has been observed within the Plan Area.
<i>Trifolium depauperatum</i> var. <i>hydrophilum</i> Saline clover	-- / -- / 1B	Marshes and swamps, valley and foothill grassland (mesic, alkaline), and vernal pools at elevations of 0-300 meters. Annual herb in the Fabaceae family; blooms April-June.	Unlikely: This species is not documented to occur within the Plan Area. Plan area does not contain suitable habitat.
<i>Trifolium polyodon</i> Pacific Grove clover	-- / SR / 1B	Closed-cone coniferous forest, coastal prairie, meadows and seeps, and mesic areas in valley and foothill grassland at elevations of 5-120 meters. Annual herb in the Fabaceae family; blooms April-June.	Known: This species has been observed within the Plan Area.
<i>Trifolium trichocalyx</i> Monterey clover	FE / SE / 1B	Sandy openings and burned areas of closed-cone coniferous forest at elevations of 30-240 meters. Annual herb in the Fabaceae family; blooms April-June.	Unlikely: This species is not documented to occur within the Plan Area. Plan area does not contain suitable habitat.

STATUS DEFINITIONS

U.S. Fish and Wildlife Service (USFWS)

FE = listed as Endangered under the federal Endangered Species Act
FT = listed as Threatened under the federal Endangered Species Act
-- = no listing

California Department of Fish and Game (CDFW)

SE = listed as Endangered under the California Endangered Species Act
ST = listed as Threatened under the California Endangered Species Act
SR = listed as Rare under the California Endangered Species Act
SC = Candidate for listing under the California Endangered Species Act
SSC = California Department of Fish and Wildlife Species of Special Concern
SFP = Stated Fully Protected Animal
-- = no listing

CNDDDB = This designation is being assigned to animal species that are not assigned any of the other status designations defined in this table. These animal species are included in the DFW's CNDDDB "Special Animals" list (2015), which includes all taxa the CNDDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special-status species." The CDFW considers the taxa on this list to be those of greatest conservation need.

California Native Plant Society (CNPS)

- 1B = California Rare Plant Rank 1B species; Rare, Threatened or Endangered in California and elsewhere
- 2 = California Rare Plant Rank 2 species; Rare, Threatened, or Endangered in California, but more common elsewhere
- 3 = California Rare Plant Rank 3 species; plants about which more information is needed
- 4 = California Rare Plant Rank 4 species; plants of limited distribution
- = no Ranking

POTENTIAL TO OCCUR

Present = known occurrence of species within the site; presence of suitable habitat conditions; or observed during field surveys.

High = known occurrence of species in the vicinity from the CNDDDB or other documentation; presence of suitable habitat conditions.

Moderate = known occurrence of species in the vicinity from the CNDDDB or other documentation; presence of marginal habitat conditions within the site.

Low = species known to occur in the vicinity from the CNDDDB or other documentation; lack of suitable habitat or poor quality.

Unlikely = species not known to occur in the vicinity from the CNDDDB or other documentation, no suitable habitat is present within the site.

Not Present = species not identified during focused surveys.

* = **Bold** text indicates Fort Ord HMP and HCP species



Selected Elements by Element Code
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad (Carmel Valley (3612146) OR Chualar (3612155) OR Marina (3612167) OR Monterey (3612158) OR Moss Landing (3612177) OR Mt. Carmel (3612147) OR Natividad (3612165) OR Prunedale (3612176) OR Rana Creek (3612145) OR Salinas (3612166) OR San Juan Bautista (3612175) OR Seaside (3612157) OR Soberanes Point (3612148) OR Spreckels (3612156))

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AAAAA01082	<i>Ambystoma macrodactylum croceum</i> Santa Cruz long-toed salamander	Endangered	Endangered	G5T1T2	S1S2	FP
AAAAA01180	<i>Ambystoma californiense</i> California tiger salamander	Threatened	Threatened	G2G3	S2S3	WL
AAAAF02032	<i>Taricha torosa</i> Coast Range newt	None	None	G4	S4	SSC
AAABH01022	<i>Rana draytonii</i> California red-legged frog	Threatened	None	G2G3	S2S3	SSC
AAABH01050	<i>Rana boylei</i> foothill yellow-legged frog	None	Candidate Threatened	G3	S3	SSC
ABNDC04030	<i>Oceanodroma homochroa</i> ashy storm-petrel	None	None	G2	S2	SSC
ABNFC01021	<i>Pelecanus occidentalis californicus</i> California brown pelican	Delisted	Delisted	G4T3	S3	FP
ABNKC06010	<i>Elanus leucurus</i> white-tailed kite	None	None	G5	S3S4	FP
ABNKC12040	<i>Accipiter cooperii</i> Cooper's hawk	None	None	G5	S4	WL
ABNKC19070	<i>Buteo swainsoni</i> Swainson's hawk	None	Threatened	G5	S3	
ABNKC19120	<i>Buteo regalis</i> ferruginous hawk	None	None	G4	S3S4	WL
ABNKC22010	<i>Aquila chrysaetos</i> golden eagle	None	None	G5	S3	FP
ABNKD06071	<i>Falco peregrinus anatum</i> American peregrine falcon	Delisted	Delisted	G4T4	S3S4	FP
ABNKD06090	<i>Falco mexicanus</i> prairie falcon	None	None	G5	S4	WL
ABNME03041	<i>Laterallus jamaicensis coturniculus</i> California black rail	None	Threatened	G3G4T1	S1	FP
ABNME05016	<i>Rallus obsoletus obsoletus</i> California Ridgway's rail	Endangered	Endangered	G5T1	S1	FP
ABNNB03031	<i>Charadrius alexandrinus nivosus</i> western snowy plover	Threatened	None	G3T3	S2S3	SSC
ABNSB10010	<i>Athene cunicularia</i> burrowing owl	None	None	G4	S3	SSC



Selected Elements by Element Code
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California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
ABNSB13040	<i>Asio flammeus</i> short-eared owl	None	None	G5	S3	SSC
ABNUA01010	<i>Cypseloides niger</i> black swift	None	None	G4	S2	SSC
ABPAT02011	<i>Eremophila alpestris actia</i> California horned lark	None	None	G5T4Q	S4	WL
ABPAU08010	<i>Riparia riparia</i> bank swallow	None	Threatened	G5	S2	
ABPBW01114	<i>Vireo bellii pusillus</i> least Bell's vireo	Endangered	Endangered	G5T2	S2	
ABPBXB0020	<i>Agelaius tricolor</i> tricolored blackbird	None	Candidate Endangered	G2G3	S1S2	SSC
AFCHA0209H	<i>Oncorhynchus mykiss irideus</i> steelhead - south-central California coast DPS	Threatened	None	G5T2Q	S2	
AFCHB03010	<i>Spirinchus thaleichthys</i> longfin smelt	Candidate	Threatened	G5	S1	SSC
AFCQN04010	<i>Eucyclogobius newberryi</i> tidewater goby	Endangered	None	G3	S3	SSC
AMACC05030	<i>Lasiurus cinereus</i> hoary bat	None	None	G5	S4	
AMACC08010	<i>Corynorhinus townsendii</i> Townsend's big-eared bat	None	None	G3G4	S2	SSC
AMACC10010	<i>Antrozous pallidus</i> pallid bat	None	None	G5	S3	SSC
AMAFF02032	<i>Reithrodontomys megalotis distichlis</i> Salinas harvest mouse	None	None	G5T1	S1	
AMAFF08083	<i>Neotoma macrotis luciana</i> Monterey dusky-footed woodrat	None	None	G5T3	S3	SSC
AMAJF04010	<i>Taxidea taxus</i> American badger	None	None	G5	S3	SSC
ARAAD02030	<i>Emys marmorata</i> western pond turtle	None	None	G3G4	S3	SSC
ARACC01020	<i>Anniella pulchra</i> northern California legless lizard	None	None	G3	S3	SSC
ARACF12100	<i>Phrynosoma blainvillii</i> coast horned lizard	None	None	G3G4	S3S4	SSC
ARADB36160	<i>Thamnophis hammondi</i> two-striped gartersnake	None	None	G4	S3S4	SSC
CTT21320CA	<i>Central Dune Scrub</i> Central Dune Scrub	None	None	G2	S2.2	
CTT37C20CA	<i>Central Maritime Chaparral</i> Central Maritime Chaparral	None	None	G2	S2.2	



Selected Elements by Element Code
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Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
CTT42110CA	Valley Needlegrass Grassland Valley Needlegrass Grassland	None	None	G3	S3.1	
CTT52110CA	Northern Coastal Salt Marsh Northern Coastal Salt Marsh	None	None	G3	S3.2	
CTT52200CA	Coastal Brackish Marsh Coastal Brackish Marsh	None	None	G2	S2.1	
CTT52410CA	Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	None	None	G3	S2.1	
CTT83121CA	Northern Bishop Pine Forest Northern Bishop Pine Forest	None	None	G2	S2.2	
CTT83130CA	Monterey Pine Forest Monterey Pine Forest	None	None	G1	S1.1	
CTT83150CA	Monterey Cypress Forest Monterey Cypress Forest	None	None	G1	S1.2	
CTT83162CA	Monterey Pygmy Cypress Forest Monterey Pygmy Cypress Forest	None	None	G1	S1.1	
ICBRA06010	Linderiella occidentalis California linderiella	None	None	G2G3	S2S3	
IICOL4A010	Coelus globosus globose dune beetle	None	None	G1G2	S1S2	
IICOL5E020	Optioservus canus Pinnacles optioservus riffle beetle	None	None	G1	S1	
IIHYM24250	Bombus occidentalis western bumble bee	None	None	G2G3	S1	
IIHYM24380	Bombus caliginosus obscure bumble bee	None	None	G4?	S1S2	
IILEPG2026	Euphilotes enoptes smithi Smith's blue butterfly	Endangered	None	G5T1T2	S1S2	
IILEPK4055	Euphydryas editha bayensis Bay checkerspot butterfly	Threatened	None	G5T1	S1	
IILEPP2012	Danaus plexippus pop. 1 monarch - California overwintering population	None	None	G4T2T3	S2S3	
IMGASC2421	Helminthoglypta sequoicola consors redwood shoulderband	None	None	G2T1	S1	
IMGASJ7040	Tryonia imitator mimic tryonia (=California brackishwater snail)	None	None	G2	S2	
NBMUS7L090	Tortula californica California screw moss	None	None	G2G3	S2S3	1B.2
NLLEC3S340	Ramalina thrausta angel's hair lichen	None	None	G5	S2?	2B.1
NLTEST5460	Bryoria spiralis twisted horsehair lichen	None	None	G3	S1S2	1B.1



Selected Elements by Element Code
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California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDAST3L080	<i>Ericameria fasciculata</i> Eastwood's goldenbush	None	None	G2	S2	1B.1
PDAST4R0P1	<i>Centromadia parryi ssp. congonii</i> Congdon's tarplant	None	None	G3T2	S2	1B.1
PDAST4X020	<i>Holocarpha macradenia</i> Santa Cruz tarplant	Threatened	Endangered	G1	S1	1B.1
PDAST5L040	<i>Lasthenia conjugens</i> Contra Costa goldfields	Endangered	None	G1	S1	1B.1
PDAST5N010	<i>Layia carnosa</i> beach layia	Endangered	Endangered	G2	S2	1B.1
PDAST660C2	<i>Malacothrix saxatilis var. arachnoidea</i> Carmel Valley malacothrix	None	None	G5T2	S2	1B.2
PDAST6E050	<i>Stebbinsoseris decipiens</i> Santa Cruz microseris	None	None	G2	S2	1B.2
PDAST6E0D0	<i>Microseris paludosa</i> marsh microseris	None	None	G2	S2	1B.2
PDAST6G010	<i>Monolopia gracilens</i> woodland woollythreads	None	None	G3	S3	1B.2
PDBOR0V061	<i>Plagiobothrys chorisianus var. chorisianus</i> Choris' popcornflower	None	None	G3T2Q	S2	1B.2
PDBOR0V080	<i>Plagiobothrys diffusus</i> San Francisco popcornflower	None	Endangered	G1Q	S1	1B.1
PDBOR0V170	<i>Plagiobothrys uncinatus</i> hooked popcornflower	None	None	G2	S2	1B.2
PDBRA16010	<i>Erysimum ammophilum</i> sand-loving wallflower	None	None	G2	S2	1B.2
PDBRA160R0	<i>Erysimum menziesii</i> Menzies' wallflower	Endangered	Endangered	G1	S1	1B.1
PDCAM0C010	<i>Legenere limosa</i> legenere	None	None	G2	S2	1B.1
PDERI040J1	<i>Arctostaphylos hookeri ssp. hookeri</i> Hooker's manzanita	None	None	G3T2	S2	1B.2
PDERI040R0	<i>Arctostaphylos montereyensis</i> Toro manzanita	None	None	G2G3	S2S3	1B.2
PDERI04100	<i>Arctostaphylos pajaroensis</i> Pajaro manzanita	None	None	G1	S1	1B.1
PDERI04180	<i>Arctostaphylos pumila</i> sandmat manzanita	None	None	G1	S1	1B.2
PDERI04260	<i>Arctostaphylos edmundsii</i> Little Sur manzanita	None	None	G2	S2	1B.2
PDFAB0F8R1	<i>Astragalus tener var. tener</i> alkali milk-vetch	None	None	G2T2	S2	1B.2



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Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDFAB0F8R2	<i>Astragalus tener</i> var. <i>titi</i> coastal dunes milk-vetch	Endangered	Endangered	G2T1	S1	1B.1
PDFAB2B3Y0	<i>Lupinus tidestromii</i> Tidestrom's lupine	Endangered	Endangered	G1	S1	1B.1
PDFAB400R5	<i>Trifolium hydrophilum</i> saline clover	None	None	G2	S2	1B.2
PDFAB402H0	<i>Trifolium polyodon</i> Pacific Grove clover	None	Rare	G1	S1	1B.1
PDFAB402J0	<i>Trifolium trichocalyx</i> Monterey clover	Endangered	Endangered	G1	S1	1B.1
PDFAB402W0	<i>Trifolium buckwestiorum</i> Santa Cruz clover	None	None	G2	S2	1B.1
PDGER01070	<i>California macrophylla</i> round-leaved filaree	None	None	G3?	S3?	1B.2
PDLAM18162	<i>Monardella sinuata</i> ssp. <i>nigrescens</i> northern curly-leaved monardella	None	None	G3T2	S2	1B.2
PDMAL0Q0B1	<i>Malacothamnus palmeri</i> var. <i>involucratus</i> Carmel Valley bush-mallow	None	None	G3T2Q	S2	1B.2
PDMAL110E0	<i>Sidalcea malachroides</i> maple-leaved checkerbloom	None	None	G3	S3	4.2
PDONA050L0	<i>Clarkia jolonensis</i> Jolon clarkia	None	None	G2	S2	1B.2
PDPAP0G030	<i>Meconella oregana</i> Oregon meconella	None	None	G2G3	S2	1B.1
PDPGN040M2	<i>Chorizanthe pungens</i> var. <i>pungens</i> Monterey spineflower	Threatened	None	G2T2	S2	1B.2
PDPGN040Q2	<i>Chorizanthe robusta</i> var. <i>robusta</i> robust spineflower	Endangered	None	G2T1	S1	1B.1
PDPGN04100	<i>Chorizanthe minutiflora</i> Fort Ord spineflower	None	None	G1	S1	1B.2
PDPGN08470	<i>Eriogonum nortonii</i> Pinnacles buckwheat	None	None	G2	S2	1B.3
PDPLM041P2	<i>Gilia tenuiflora</i> ssp. <i>arenaria</i> Monterey gilia	Endangered	Threatened	G3G4T2	S2	1B.2
PDRAN0B0A2	<i>Delphinium californicum</i> ssp. <i>interius</i> Hospital Canyon larkspur	None	None	G3T3	S3	1B.2
PDRAN0B0V0	<i>Delphinium hutchinsoniae</i> Hutchinson's larkspur	None	None	G2	S2	1B.2
PDRAN0B1W0	<i>Delphinium umbraculorum</i> umbrella larkspur	None	None	G3	S3	1B.3
PDROS0W043	<i>Horkelia cuneata</i> var. <i>sericea</i> Kellogg's horkelia	None	None	G4T1?	S1?	1B.1



Selected Elements by Element Code
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Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
PDROS0W0B0	<i>Horkelia marinensis</i> Point Reyes horkelia	None	None	G2	S2	1B.2
PDROS1B0U0	<i>Potentilla hickmanii</i> Hickman's cinquefoil	Endangered	Endangered	G1	S1	1B.1
PDROS1J0W0	<i>Rosa pinetorum</i> pine rose	None	None	G2	S2	1B.2
PDSCR0D403	<i>Castilleja ambigua var. insalutata</i> pink Johnny-nip	None	None	G4T2	S2	1B.1
PDSCR0H0B0	<i>Collinsia multicolor</i> San Francisco collinsia	None	None	G2	S2	1B.2
PDSCR0J0P2	<i>Cordylanthus rigidus ssp. littoralis</i> seaside bird's-beak	None	Endangered	G5T2	S2	1B.1
PGCUP04031	<i>Hesperocyparis goveniana</i> Gowen cypress	Threatened	None	G1	S1	1B.2
PGCUP04060	<i>Hesperocyparis macrocarpa</i> Monterey cypress	None	None	G1	S1	1B.2
PGPIN040V0	<i>Pinus radiata</i> Monterey pine	None	None	G1	S1	1B.1
PMLIL02140	<i>Allium hickmanii</i> Hickman's onion	None	None	G2	S2	1B.2
PMLIL0V0C0	<i>Fritillaria liliacea</i> fragrant fritillary	None	None	G2	S2	1B.2
PMORC1X070	<i>Piperia yadonii</i> Yadon's rein orchid	Endangered	None	G1	S1	1B.1
PMPOA041N0	<i>Agrostis lacuna-vernalis</i> vernal pool bent grass	None	None	G1	S1	1B.1

Record Count: 115



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
Phone: (805) 644-1766 Fax: (805) 644-3958

In Reply Refer To:

September 13, 2017

Consultation Code: 08EVEN00-2017-SLI-0645

Event Code: 08EVEN00-2017-E-01432

Project Name: Fort Ord

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a

written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[*A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.]

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ventura Fish And Wildlife Office

2493 Portola Road, Suite B

Ventura, CA 93003-7726

(805) 644-1766

Project Summary

Consultation Code: 08EVEN00-2017-SLI-0645

Event Code: 08EVEN00-2017-E-01432

Project Name: Fort Ord

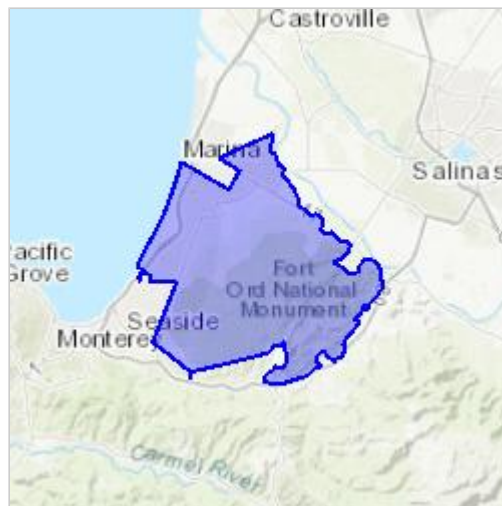
Project Type: ** OTHER **

Project Description: Fort Ord HCP EIR/EIS

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/36.63297941591523N121.77798597694814W>



Counties: Monterey, CA

Endangered Species Act Species

There is a total of 20 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Mammals

NAME	STATUS
Southern Sea Otter <i>Enhydra lutris nereis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8560	Threatened

Birds

NAME	STATUS
<p>California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193</p>	Endangered
<p>California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104</p>	Endangered
<p>Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945</p>	Endangered
<p>Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467</p>	Threatened
<p>Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749</p>	Endangered
<p>Western Snowy Plover <i>Charadrius alexandrinus nivosus</i> Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is final designated critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035</p>	Threatened

Amphibians

NAME	STATUS
<p>California Red-legged Frog <i>Rana draytonii</i></p> <p>There is final designated critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/2891</p>	Threatened
<p>California Tiger Salamander <i>Ambystoma californiense</i></p> <p>Population: U.S.A. (Central CA DPS)</p> <p>There is final designated critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/2076</p>	Threatened
<p>Santa Cruz Long-toed Salamander <i>Ambystoma macrodactylum croceum</i></p> <p>There is proposed critical habitat for this species. The location of the critical habitat is not available.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/7405</p>	Endangered

Fishes

NAME	STATUS
<p>Tidewater Goby <i>Eucyclogobius newberryi</i></p> <p>There is final designated critical habitat for this species. Your location is outside the critical habitat.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/57</p>	Endangered

Insects

NAME	STATUS
<p>Smith's Blue Butterfly <i>Euphilotes enoptes smithi</i></p> <p>There is proposed critical habitat for this species. The location of the critical habitat is not available.</p> <p>Species profile: https://ecos.fws.gov/ecp/species/4418</p>	Endangered

Crustaceans

NAME

STATUS

Vernal Pool Fairy Shrimp *Branchinecta lynchi*

Threatened

There is **final designated** critical habitat for this species. Your location is outside the critical habitat.

Species profile: <https://ecos.fws.gov/ecp/species/498>

Flowering Plants

NAME	STATUS
Clover Lupine <i>Lupinus tidestromii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4459	Endangered
Contra Costa Goldfields <i>Lasthenia conjugens</i> There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7058	Endangered
Marsh Sandwort <i>Arenaria paludicola</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2229	Endangered
Menzies' Wallflower <i>Erysimum menziesii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2935	Endangered
Monterey Gilia <i>Gilia tenuiflora ssp. arenaria</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/856	Endangered
Monterey Spineflower <i>Chorizanthe pungens var. pungens</i> There is final designated critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/396	Threatened
Yadon's Piperia <i>Piperia yadonii</i> There is final designated critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4205	Endangered

Critical habitats

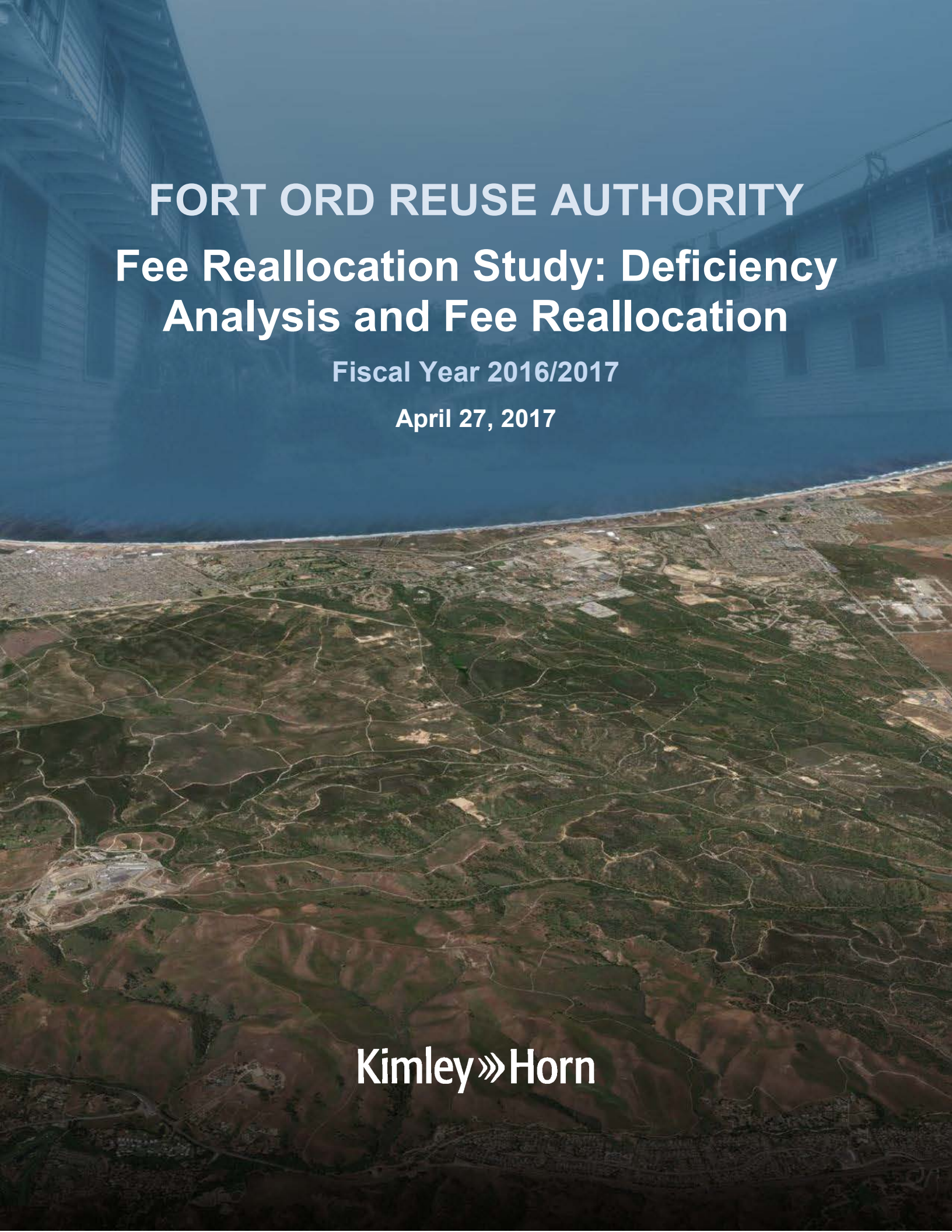
There are 7 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Monterey Spineflower <i>Chorizanthe pungens var. pungens</i> https://ecos.fws.gov/ecp/species/396#crithab	Final designated

<p>Steelhead <i>Oncorhynchus</i> (=Salmo) mykiss Population: Northern California DPS For information on why this critical habitat appears for your project, even though Steelhead is not on the list of potentially affected species at this location, contact the local field office. https://ecos.fws.gov/ecp/species/1007#crithab</p>	Final designated
<p>Steelhead <i>Oncorhynchus</i> (=Salmo) mykiss Population: South-Central California Coast DPS For information on why this critical habitat appears for your project, even though Steelhead is not on the list of potentially affected species at this location, contact the local field office. https://ecos.fws.gov/ecp/species/1007#crithab</p>	Final designated
<p>Steelhead <i>Oncorhynchus</i> (=Salmo) mykiss Population: Central California Coast DPS For information on why this critical habitat appears for your project, even though Steelhead is not on the list of potentially affected species at this location, contact the local field office. https://ecos.fws.gov/ecp/species/1007#crithab</p>	Final designated
<p>Steelhead <i>Oncorhynchus</i> (=Salmo) mykiss Population: California Central Valley DPS For information on why this critical habitat appears for your project, even though Steelhead is not on the list of potentially affected species at this location, contact the local field office. https://ecos.fws.gov/ecp/species/1007#crithab</p>	Final designated
<p>Steelhead <i>Oncorhynchus</i> (=Salmo) mykiss Population: Southern California DPS For information on why this critical habitat appears for your project, even though Steelhead is not on the list of potentially affected species at this location, contact the local field office. https://ecos.fws.gov/ecp/species/1007#crithab</p>	Final designated
<p>Western Snowy Plover <i>Charadrius alexandrinus nivosus</i> https://ecos.fws.gov/ecp/species/8035#crithab</p>	Final designated

Appendix C
Traffic Analysis

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FORT ORD REUSE AUTHORITY

Fee Reallocation Study: Deficiency Analysis and Fee Reallocation

Fiscal Year 2016/2017

April 27, 2017

Kimley»»Horn





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EXECUTIVE SUMMARY

Purpose

The purpose of this report is to present the results of the Fort Ord Reuse Authority (FORA) Fee Reallocation Study including the deficiency analysis and fee reallocation, and to describe the final project steps.

The analysis looked at a Build 2015 Capital Improvement Program (CIP), a Build Alternative, and No Build scenario and the resulting future traffic congestion under each. The results of the No Build scenario shows that, by 2035, if FORA does not build the FORA CIP transportation projects, seven of the existing roadways in the current FORA project list will operate at deficient levels (Levels of Service E or F). If FORA completes the CIP transportation projects (Build 2015 or Build Alternative scenario), the study roadways would operate at acceptable levels of service (Levels of Service D or better). The **Build 2015 CIP** and **Build Alternative CIP** analysis shows two roadways (Reservation Road between Davis and Watkins Gate Roads, and Eastside Parkway) would operate at a LOS D/E by 2035 (however, these two LOS D/E roadways are within the margin of error to the acceptable LOS D). This analysis shows that the FORA CIP projects provide sufficient improvement to the roadway network to address future growth-related transportation deficiencies.

Due to costs and other constraints of widening Highway 1 between Fremont Boulevard and Del Monte Boulevard, the **Build Alternative CIP** was considered that provides enhanced transit service, interchange, and other roadway operational improvements. Conceptual transit improvements analyzed included Bus-On-Shoulder operations along Highway 1 and enhanced transit service along corridors. Kimley-Horn's major findings were that 1) approximately 70% of the future traffic growth that would have otherwise been accommodated by a Highway 1 widening is anticipated to be accommodated by Del Monte Boulevard, Fremont Boulevard, and General Jim Moore, and that 2) transit ridership in the Association of Monterey Bay Area Government's Regional Travel Demand Model is projected to increase in the future.

Using the resultant analysis included within this document, a revised cost allocation of the remaining FORA obligations was prepared. It is important to note that although the FORA fee was previously calculated in a manner similar to a typical impact fee, it is in fact a Mello-Roos tax, and, as such, this allows for flexibility in determining specific methods for cost reallocation such that they best support the Fort Ord Reuse Authority and local jurisdiction goals and policies. As such, two options are presented for the reallocation methodology: Nexus Approach and Fund Local Projects First Approach.

Accordingly, for the purpose of maintaining consistency with prior work, the cost obligation maintained 2005 as the basis for determining existing deficiency. This avoids substantial changes in FORA funding prioritizations that might otherwise occur as the result of new improvements or



other circumstances resulting in changes to existing deficiencies. Furthermore, recognizing that the FORA obligation can not be increased beyond the limit originally established in the 2005 study (as inflated by the Construction Cost Index), the results of the fair share analysis were recalculated using a weighting methodology so that the total obligation for the projects in aggregate remained within the funding limit. Similarly to what was undertaken in the 2005 study, it is anticipated that the resultant reallocation will be further refined to reflect the priorities of FORA and local jurisdictions.

Recommendations

Based on these findings, Kimley-Horn recommends that FORA confirm the **Build Alternative CIP** transportation network as the same as the **Build 2015 CIP** transportation network with the following changes:

- Broaden the description of “regional” project R3a widening Highway 1 between Fremont Boulevard and Del Monte Boulevard to be renamed as Highway 1 Corridor improvements and include new enhanced transit improvements and service (Bus on Shoulder or Monterey Branch Line Bus Rapid Transit, and Local Monterey-Salinas Transit Service), and improvements to the Highway 1 – Fremont Boulevard Interchange in Seaside; and
- At the request of the City of Marina, include the 2nd Avenue Extension in the FORA CIP, redistributing funds from the other road projects in the City of Marina.

It is further recommended that the cost reallocation included within this document as **Table 20** be used as the starting point for updating the FORA CIP Obligations, recognizing that it is likely that further adjustments will be necessary based on Fort Ord Reuse Authority and local jurisdiction direction. In particular, the FORA Administrative Committee has recommended using Option B from **Table 21** as the basis for the reallocation.



INTRODUCTION

Project Background

The 1997 Base Reuse Plan (BRP) states that FORA shall fund its “Fair Share” of “on-site,” “off-site,” and “regional” roadway and transit capital improvements based on a nexus analysis from the Transportation Agency for Monterey County (TAMC). The BRP also requires that FORA work with TAMC to monitor projected traffic levels within the transportation network. To meet these requirements, TAMC prepared the *Fort Ord Transportation Study Final Report* on July 8, 1997 and the *FORA Fee Reallocation Study* on April 15, 2005. To continue to meet these requirements, in 2015, FORA entered into a reimbursement agreement with TAMC to fund a new FORA Fee Reallocation Study.

Key Terms

Deficiency analysis is a methodology used to determine weaknesses found in a system. In terms of a transportation network study, a deficiency analysis uses Level of Service (LOS).

Level of Service (LOS) is a measure for qualitatively assessing roadway quality. TAMC and FORA have established acceptable service levels as LOS D or better.

Regional Travel Demand Model is a forecasting tool used to estimate the number of vehicles that will use a specific transportation facility in the future.

Traffic Analysis Zone (TAZ) is the unit of geography used in the Regional Travel Demand Model. It includes input data for households and employment that the Regional Travel Demand Model requires.

Average Daily Traffic (ADT) is the average weekday traffic counted in a location over several days during a period of the year of considered typical.


Peak Hour is the “rush hour” or highest hourly traffic volume in either the AM or the PM.

Capital Improvement Plan (CIP) is a short-range plan that identifies capital projects including financing options.

Key Findings

Kimley-Horn prepared analysis which included completing model runs using with the Association of Monterey Bay Area Governments (AMBAG) Regional Travel Demand Model for the following conditions (tables summarizing the evaluation results are noted in parenthesis):

1. **Existing Conditions:** which includes existing land use on the existing roadway network (**Table 9**). Although, existing count data is actually used as the basis for analyzing LOS, this run is necessary for post-processing and other analysis purposes.
2. **No-Build:** which considers 2035 land use conditions on the existing roadway network (**Table 10**).
3. **Future Deficiency Analysis:** which considers 2035 land use conditions with the 2014 Regional Transportation Plan roadway improvements only (no FORA CIP) (**Table 11**).

- 
4. **Build 2015 CIP:** which is 2035 land use conditions with FORA CIP and the 2014 Regional Transportation Plan roadway improvements (**Table 12**).
 5. **Build Alternative CIP:** which includes 2035 land use conditions with the FORA CIP, including alternative Highway 1 Corridor Improvements, 2nd Avenue Extension in City of Marina, and the 2014 Regional Transportation Plan roadway improvements (**Table 13**).

In addition to BRP requirements, FORA has engaged with TAMC to complete the 2017 FORA Fee Reallocation Study for the following reasons:

1. FORA's transportation cost estimates were developed through the *2005 FORA Fee Reallocation Study* and have not been updated since that time. Updating transportation costs using most recent estimates will provide greater certainty regarding FORA's funding obligations.
2. AMBAG and TAMC updated the Regional Transportation Plan (RTP) in 2014/15. FORA's transportation obligations need to be consistent with current RTP projects.
3. Former Fort Ord land use jurisdictions have new land use plans since 2005, which may result in changes to the "on-site" BRP transportation network. Such changes could affect the capacity of the "on-site" roadway network. TAMC and FORA need to analyze the net effect of these modifications to assure that the required capacity of the "on-site" network can support planned BRP development.
4. FORA can use updated information regarding its transportation obligations from the 2017 FORA Fee Reallocation Study to assist in preparing the FORA transition plan, which must be completed prior to 2019.

Scope

The study's workplan was to produce the 2017 FORA Fee Reallocation Study, which includes the following tasks:

1. Review/modify land use assumptions on former Fort Ord primarily based on the 2016/17 FORA CIP;
2. Review the 2014 AMBAG Regional Travel Demand Model for use in this study;
3. Review/modify future network assumptions – includes creating three transportation networks for travel forecast analysis: **No-Build**, **Build 2015 CIP**, and **Build Alternative CIP**;
4. Complete deficiency analysis – conduct model runs on three transportation networks, identify deficiencies/weaknesses attributed to growth, and summarize results;
5. Complete fee reallocation – run select link analysis to determine the fair share proportions for the fee allocation;
6. Complete project funding analysis



FEE REALLOCATION STUDY

The purpose of the 2017 FORA Fee Reallocation Study is to assess the current conditions of the transportation network (**Existing Conditions**) and how the proposed developments within the former Fort Ord boundaries will impact the future transportation network (**Future Deficiency Analysis**) and the effectiveness of the FORA Capital Improvement Program (CIP) at mitigating those impacts (**Build 2015 CIP** and **Build Alternative CIP**).

Methods:

The 2014 AMBAG Regional Travel Demand Model was used to determine the deficiencies for the roadway network, focusing on the FORA CIP road network. AMBAG completed an update of the model for the Metropolitan Transportation Plan / Sustainable Communities (2035 MTP/SCS and RTP) for Monterey, San Benito, and Santa Cruz Counties. The model includes detailed transportation and transit networks, as well as a geographically based TAZ layer containing socioeconomic data for the base year 2010 and forecast years 2020 and 2035. The AMBAG Regional Travel Demand Model is estimated and calibrated to 2010 conditions using data from the 2011-12 California Household Travel Survey, US Census, employment, and traffic data from that same year.

[Review & Update of Land Use Assumptions](#)

The 2005 FORA Fee Reallocation Study presented land use data that reflected the total development levels included in the Base Reuse Plan and reflected the planning efforts at the time of the study.

Kimley-Horn, in consultation with FORA staff, completed additional updates to the model to refine the model's transportation network, reflect the Base Reuse Plan land use assumptions, as well as include more recent development data for the former Fort Ord area. Since the Base Reuse Plan allows a limited amount of development to occur within former Fort Ord, this analysis assumes the resource constrained Base Reuse Plan buildout described in FORA's Development and Resource Management Plan (DRMP) (BRP section 3.11.5) for scenarios that include 2035 land use.

Table 1 and **Table 2** summarize the updated Fort Ord land use data for full buildout of projects that contribute to the 2017 FORA Fee Reallocation Study. Land use development data includes any relevant land use, employment, and household information available from development plans and regulatory documents. Data collected from the development plans and regulatory documents were categorized in accordance to the demographic and land use attributes in the 2014 AMBAG Regional Travel Demand Model (RTDM). This maintains consistency between the housing and employment totals from the collected data with the model's land use inputs. Note that **Table 1** and **Table 2** reflect readily available current project information obtained during the course of this project (detailed employment information is only presented for FORA land use projects). **Figure 1** shows the TAZ structure in which the land use information for this model is contained.



Table 1: Development Forecasts FORA 2016/17 CIP: Residential (1)

Land Use Location & Description	TAZ	Future Units
NEW RESIDENTIAL		
<u>Marina</u>		
Marina Heights	839, 855, 870, 848	1,050
The Promontory	826	0
Dunes	788, 790, 791, 815, 821	970
TAMC	788	200
Marina Subtotal		2,220
<u>Seaside</u>		
Seaside Highlands (1)	765	0
Seaside Resort	762	125
Seaside	771, 801	995
Seaside Subtotal		1,120
<u>Other</u>		
UC	801	240
Del Rey Oaks	1782	691
East Garrison	1035, 1039, 1042, 1052, 1065, 1068, 1070	1,151
Other Subtotal		2,082
TOTAL NEW RESIDENTIAL		5,422
Existing/Replacement Residential		
Preston Park (Entitled)	853	0
Seahaven (Planned)	813	400
Abrams B (Entitled)	853	0
MOCO Housing Authority (Entitled)	815	0
Shelter Outreach Plus (Entitled)	815	0
VTC (Entitled)	815	0
Interim Inc (Entitled)	815	0
Sunbay (Entitled)	769	0
Bayview (Entitled)	769	0
Seaside Highlands (Entitled)	761	0
TOTAL EXISTING/REPLACE		400
CSUMB (Planned)		492
TOTAL RESIDENTIAL UNITS		6,314

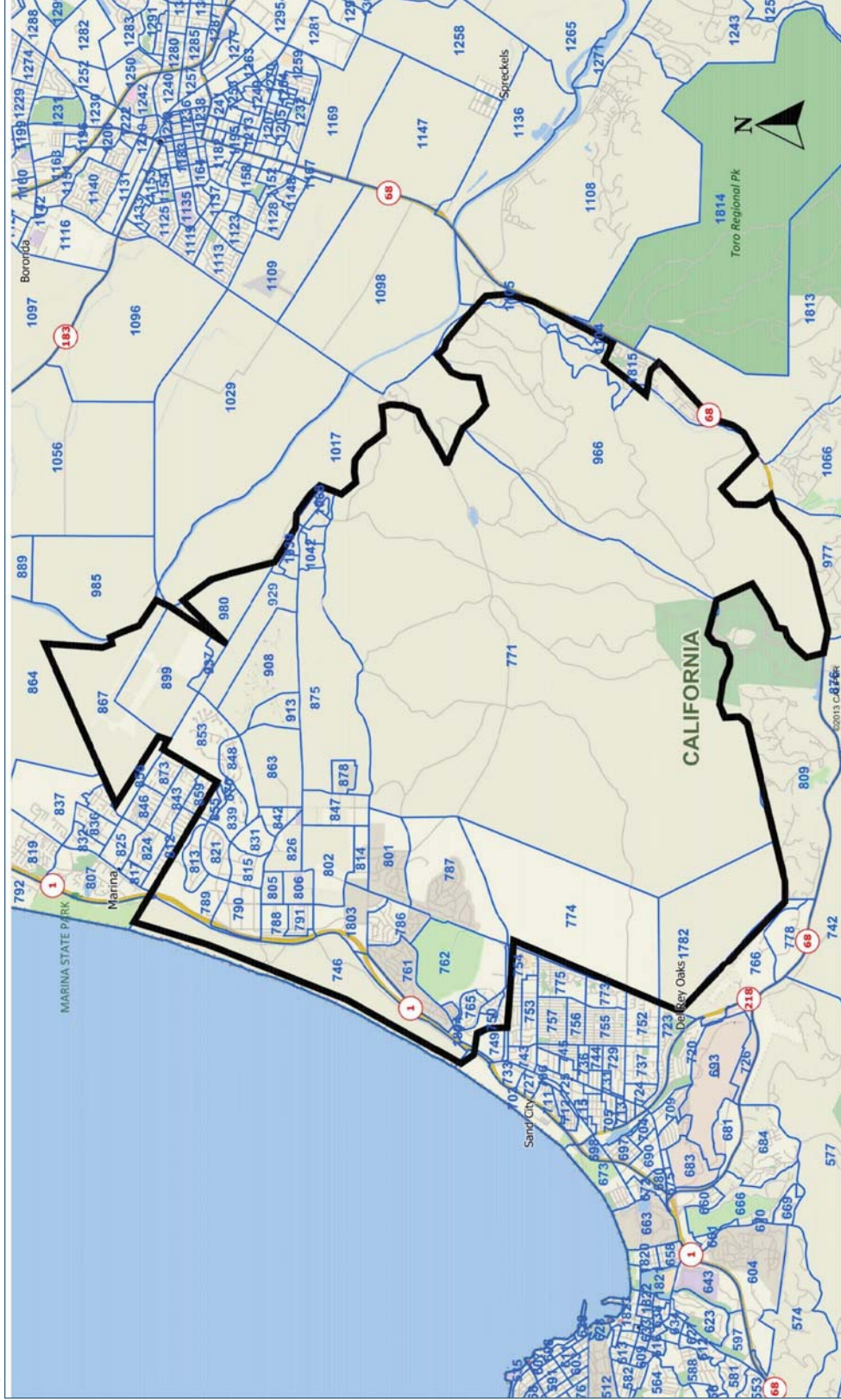
(1) Land use information based on FORA 2016/17 CIP with updates based on agency input.

Table 2: Development Forecasts FORA 2016/17 CIP: Non-Residential (1)

Land Use Location & Description	TAZ	Future Square Footage	Future Employees
NON-RESIDENTIAL			
<u>Office</u>			
Del Rey Oaks	1782	400,000	1,143
Monetary	1782	721,524	2,061
East Garrison	1052	34,000	97
Imjin Office Park	789		0
Dunes	788, 790, 791, 815, 821	349,000	997
Seahaven	813	16,000	46
Interim Inc.	815	0	0
Marina CY	899	177,000	506
TAMC	791	40,000	114
Seaside	1803	202,000	577
UC	980	680,000	1,943
<u>Industrial</u>			
Monterey	1782, 875	1,466,275	1,466
Marina CY	899	0	0
Dunes	788, 790, 791, 815, 821	0	0
Seahaven	813	6,000	6
Marina Airport	899	0	0
TAMC	791	35,000	35
Seaside	1803	125,320	125
UC	980	100,000	100
<u>Retail</u>			
Del Rey Oaks	1782	5,000	9
East Garrison	1052	40,000	73
Seahaven	813	0	0
Dunes	788, 790, 791, 815, 821	175,600	319
TAMC	791	75,000	136
Seaside Resort	762	16,300	30
Seaside	1803	1,666,500	3,030
UC	980	310,000	564
		6,640,519	13,378
HOTEL ROOMS			
<u>Hotel Rooms</u>			
Del Rey Oaks	1782		550
Dunes	790		0
Dunes	789		310
Seaside Resort	762		330
Seaside Resort TS	762		170
Seaside	1803		660
UC	980		0
			2,020

(1) Land use information based on FORA 2016/17 CIP with updates based on agency input.

Figure 1: FORA Traffic Analysis Zones





Model Validation

The development of the travel demand model used for the 2017 FORA Fee Reallocation Study was based on the validated 2014 AMBAG Regional Travel Demand Model. In addition to the updates to the land use data, the FORA model includes refinements to the free flow speeds coded into the model's roadway network to improve the model's traffic assignment for FORA area roadways. A series of static validation tests were then conducted to compare the FORA model's base year traffic volume estimates to traffic counts using standard statistical measures recommended in the Caltrans Travel Forecasting Guidelines (1992). As part of the model validation process, two-way, Average Annual Daily Traffic (AADT) counts from the 2014 AMBAG Regional Travel Demand Model was obtained for 407 roadway segments within Monterey County.

At the 407 roadway segments, the daily (24-hour) traffic assignment for the FORA model was validated for a 2010 base year using the AADT counts. The validation process was carried out at the aggregate level (the entire model) and using screenlines to cordon off discrete areas of Monterey County near FORA. The validation results by roadway classification is also reported.

The principle validation criteria used to validate the overall FORA model reference those prescribed by Caltrans guidelines that identify the correlation coefficient for the entire model and the percentage of screen lines and roadway links that should be within an allowable percent error.

- The Correlation Coefficient (R) estimates the correlation between the model volume and the actual count. The model-wide correlation coefficient should be greater than 0.88.
- The Percent Error is the difference between the model volume and the actual count divided by the actual count. The higher the percent error, the greater the difference is between the model volume and the actual count. A minimum of 75% of the screenlines should be within their maximum desirable deviation and a minimum of 75% of the roadway links should be within their maximum desirable deviation.

Model-wide Validation Summary

Both the AMBAG Regional Travel Demand Model and the FORA model met model-wide validation criteria for the correlation coefficient and number of links within their maximum desirable deviation for percent error according to Caltrans and Federal Highway Administration guidelines. The FORA model had more links overall and more freeway and principal arterial links that were within their maximum desirable deviation.

The FORA model's ability to meet or exceed the mode-wide validation criteria in **Table 3** establishes a reasonable level of confidence that the model can be used as a forecasting tool for the analysis of future conditions.



Table 3: Model-wide Validation Summary

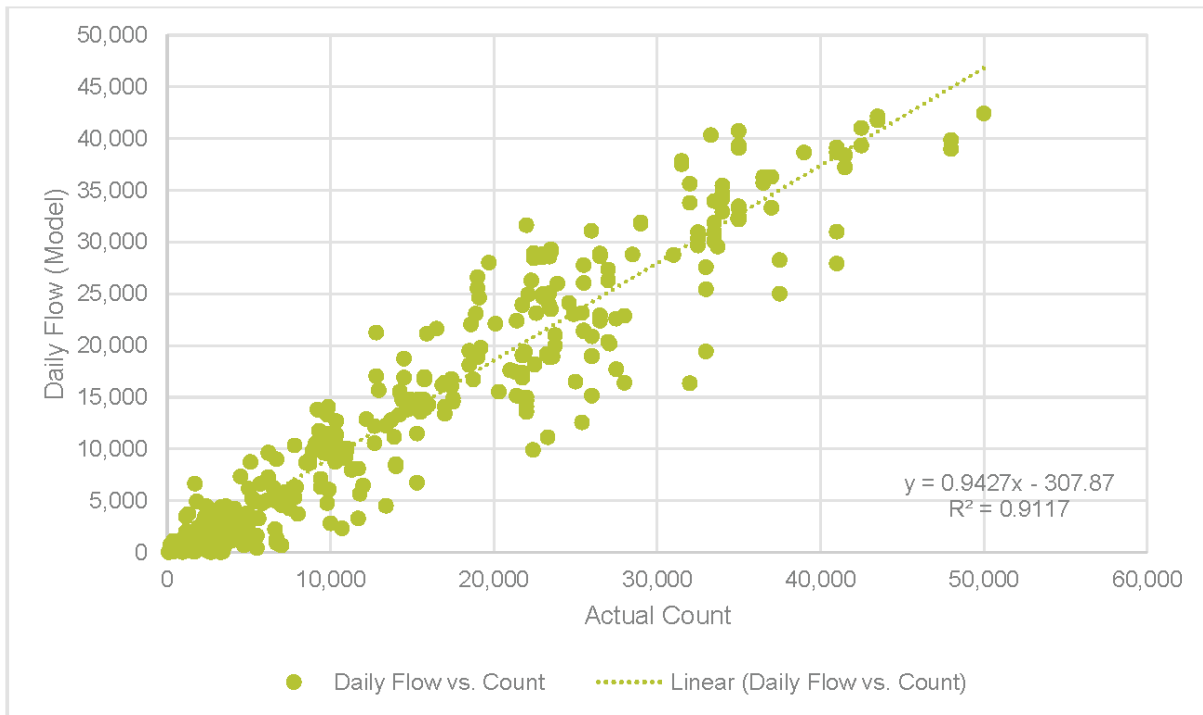
Model Validation Criteria	2014 AMBAG RTDM	FORA TIF Model
The model-wide correlation coefficient should be greater than 0.88	0.95	0.95
A minimum of 75% of the screen lines should be within their maximum desirable deviation	100%	100%
A minimum of 75% of the roadway links should be within their maximum desirable deviation (all links)	75%	76%
A minimum of 75% of the roadway links should be within their maximum desirable deviation (freeway and principal arterial links)	85%	86%

Correlation Coefficient

The scatter plot in **Figure 2** graphs the FORA model’s volume for each roadway link and the corresponding traffic count using a linear regression to show the relationship between the two. The model volumes and the actual counts have a positive correlation as shown by the slope of the trend line. The correlation coefficient for the overall model is 0.95, which indicates a strong relationship between the two variables and exceeds the targeted criteria of 0.88. The R2 for the overall model is 0.91, which indicates that the model volumes and the actual counts are good predictors of each other.



Figure 2: FORA Model Correlation Coefficient



Functional Roadway Classification

Link level validation of the FORA TIF Model was reported by functional roadway classification. The following are suggested percent error targets by functional roadway classification identified in the Caltrans guidelines:

- Freeways < 7%
- Principal Arterials < 10%
- Minor Arterials < 15%
- Collectors and Frontage Roads < 25%

The validation by functional roadway classification for the FORA model saw similar results with the AMBAG Regional Travel Demand Model where the total traffic volume assigned by the model was lower compared to the aggregate count total – but within the 10% target for overall percent error. Both models met the percent error targets for freeways and principal arterials; however, the models were outside of the targets for lower capacity roadways such as Minor Arterials, Major Collectors, Minor Collectors and Local roads that had lower levels of traffic assigned compared to the count. The link speed refinements made for the FORA model had the effect of shifting traffic off the higher capacity freeways and principal arterials to the lower capacity roadways. As a result, the FORA model had a lower total traffic assigned, which increased the overall percent error to -7.8%; however, the base year saw an improvement with a smaller percent error for the Minor Arterials and Major Collectors. **Table 4** summarizes the



results of the validation by functional roadway classification for the AMBAG Regional Travel Demand Model, and Figure 4 summarizes the results of the validation by functional roadway classification for the FORA model.

Table 4: Validation by Functional Roadway Classification (AMBAG Regional Model)

Functional Roadway Classification	# of links	Traffic Count (AADT)	Model Output (Daily)	Difference	Percent Error	Target
Freeways or Expressways	53	1,607,100	1,568,349	-38,751	-2.4%	+/- 7%
Principal Arterial	172	3,509,399	3,452,431	-56,968	-1.6%	+/- 10%
Minor Arterial	76	516,804	430,020	-86,784	-16.8%	+/- 15%
Major Collector	40	206,860	118,029	-88,831	-42.9%	+/- 25%
Minor Collector	17	58,370	33,695	-24,675	-42.3%	+/- 25%
Local	49	116,771	74,926	-41,845	-35.8%	+/- 25%
	407	6,015,304	5,677,450	-337,854	-5.6%	+/- 10%

Table 5: Validation by Functional Roadway Classification (FORA model)

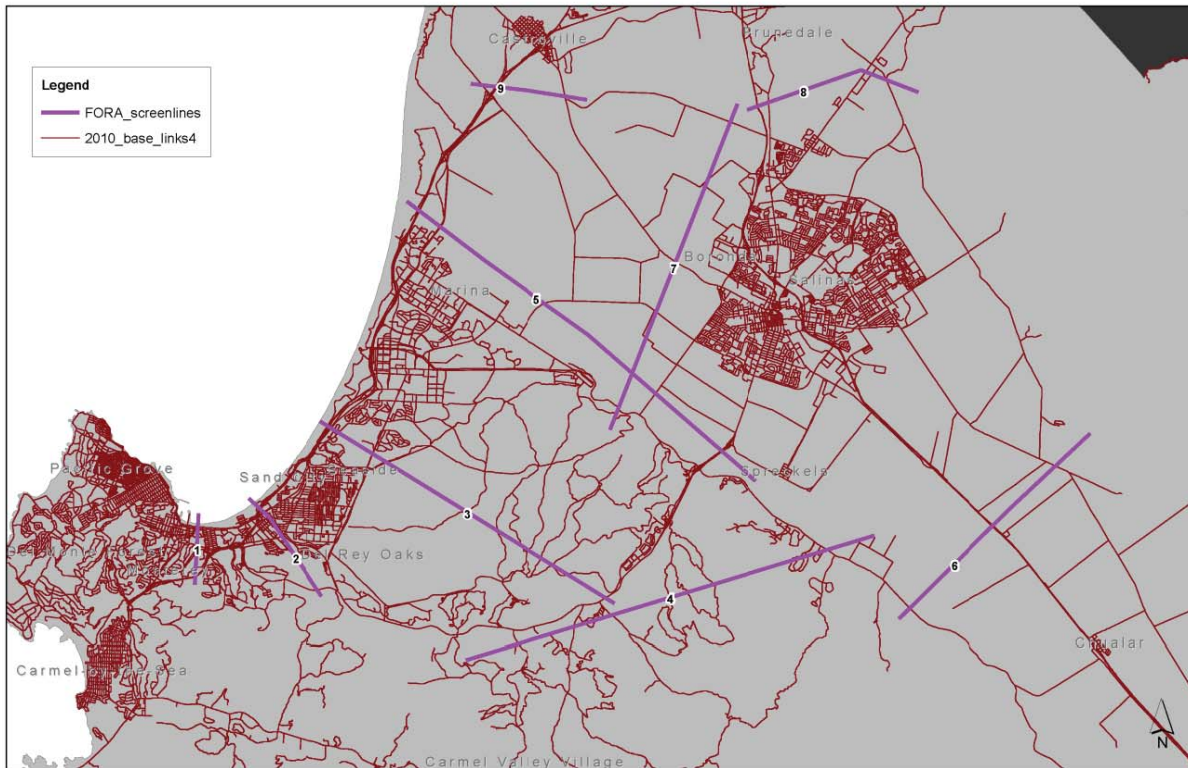
Functional Roadway Classification	# of links	Traffic Count (AADT)	Model Output (Daily)	Difference	Percent Error	Target
Freeways or Expressways	53	1,607,100	1,499,368	-107,732	-6.7%	+/- 7%
Principal Arterial	172	3,509,399	3,387,120	-122,279	-3.5%	+/- 10%
Minor Arterial	76	516,804	432,590	-84,214	-16.3%	+/- 15%
Major Collector	40	206,860	116,947	-89,913	-43.5%	+/- 25%
Minor Collector	17	58,370	34,481	-23,889	-40.9%	+/- 25%
Local	49	116,771	74,891	-41,880	-35.9%	+/- 25%
	407	6,015,304	5,545,397	-469,907	-7.8%	+/- 10%

Screenline Validation

The daily traffic assignment was validated at nine screen line locations in Monterey County as shown in **Figure 3**. A screenline represents a group of individual links that are bisected by an imaginary line. Analysis of the traffic assignment using screenlines allows for evaluating traffic flows in subareas of the model area in a directional basis. The model volumes and the actual counts on the links that constitute the screenline are evaluated by comparing the percent error to the allowable limits.



Figure 3: Model Screenline Locations



The validation by screenlines shown in **Table 6** and **Table 7** demonstrate that the FORA model has 100% of the screenlines meeting the thresholds for maximum percent deviation.

Table 6: Validation by Screenlines (AMBAG Regional Travel Demand Model)

Screenline ID	Screenline Location	Traffic Count (AADT)	Model Output (Daily)	Percent Error	NCHRP 255 Tolerance
1	East of Monterey (Between Camino El Estero and Camino Aguajito)	127,552	113,475	-11.0%	±22.7%
2	West of Canyon Del Rey	153,615	132,024	-14.1%	±21.2%
3	FORA	124,221	122,989	-1.0%	±22.9%
4	South of Salinas Hwy	29,900	22,113	-26.0%	±37.6%
5	North of Reservation Rd	111,612	127,798	14.5%	±23.7%
6	Southeast of Salinas	63,400	48,233	-23.9%	±28.9%
7	Northwest of Salinas	54,500	57,426	5.4%	±30.5%
8	North of Salinas	78,300	76,965	-1.7%	±26.9%
9	North of Reservation Rd	71,600	82,628	15.4%	±27.7%
TOTAL		814,700	783,652	-3.8%	±11.9%



Table 7: Validation by Screenlines (FORA model)

Screenline ID	Screenline Location	Traffic Count (AADT)	Model Output (Daily)	Percent Error	NCHRP 255 Tolerance
1	East of Monterey (Between Camino El Estero and Camino Aguajito)	127,552	111,620	-12.5%	±22.7%
2	West of Canyon Del Rey	153,615	126,057	-17.9%	±21.2%
3	FORA	124,221	118,693	-4.5%	±22.9%
4	South of Salinas Hwy	29,900	20,890	-30.1%	±37.6%
5	North of Reservation Rd	111,612	123,816	10.9%	±23.7%
6	Southeast of Salinas	63,400	46,907	-26.0%	±28.9%
7	Northwest of Salinas	54,500	55,891	2.6%	±30.5%
8	North of Salinas	78,300	77,044	-1.6%	±26.9%
9	North of Reservation Rd	71,600	79,496	11.0%	±27.7%
TOTAL		814,700	760,415	-6.7%	±11.9%

Individual Link Validation

The daily traffic assignment for individual roadway links was analyzed for the 407 count locations. The model volumes and the actual counts on the links are evaluated by comparing the percent error to the allowable limits.

Table 8 compares the validation results for the AMBAG Regional Travel Demand Model and the FORTA model; overall, the FORA model had a greater number of links (all and freeways and principal arterials) that were within recommended limits. Seventy-six percent of all links and 86% of the freeway and principal arterial links were within the recommended limits for percent error; the validation criteria according to Caltrans guidelines is 75% of all links.

Table 8: Validation by Individual Link Summary

		AMBAG RTDM		FORA TIF Model	
All Links	Pass	304	75%	309	76%
	Fail	103	25%	98	24%
	Total Links	407	100%	407	100%
Freeways and Principal Arterials	Pass	192	85%	194	86%
	Fail	33	15%	31	14%
	Total Links	225	100%	225	100%



FORA Capital Improvement Program Roadway Projects

To support the proposed developments within the FORA area and provide mitigation for impacts to the transportation network, the 2016 FORA CIP includes the following transportation improvement projects, which receive funding from the Community Facilities District Special Tax and are shown in **Figure 4**. Note that the projects have been identified as being Regional, Off-Site, or On-Site based on their context and relative location. Additional detail regarding improvements is provided in the exhibits detailing LOS for the various analysis scenarios later section in this study.

Regional

- SR 156 between US 101 and SR 1
- Highway 1 widening between Sand City and Seaside
- A new Monterey Road Interchange on Highway 1 in the City of Seaside

Off-Site

- Davis Road between Blanco Road and SR 183
- Davis Road between Blanco Road and Reservation Road
- Reservation Road between Davis Road and Watkins Gate Road
- Reservation Road between Watkins Gate Road and East Garrison Road
- Crescent Avenue in the City of Marina
- Abrams Road in the City of Marina
- Salinas Road in the City of Marina
- 8th Street in Marina between Inter-Garrison Road and Second Avenue

On-Site

- Eastside Parkway between Schoonover Road and Eucalyptus Road
- Inter-Garrison Road between Schoonover Road and East Garrison
- South Boundary Road between York Road and General Jim Moore Boulevard
- Gap closure of Eucalyptus Road to where Eastside Parkway starts
- Gigling Road between Eastside Parkway and General Jim Moore Boulevard
- General Jim Moore Boulevard from the four-lane section to South Boundary Road.

Figure 4: Study Area and FORA Roadway Projects





Deficiency Analysis

The following exhibits present the deficiency analysis and establishes the nexus for the FORA roadway projects to demonstrate that the proposed transportation improvements in the FORA CIP will provide adequate mitigation for future roadway deficiencies.

For the purposes of this analysis, a roadway has an acceptable service level at LOS D or better (BRP page 285). A roadway is considered deficient if the service level falls below LOS D. Data is provided for both existing and 2035 conditions.

Table 9 shows the **Existing Conditions** analysis results. As shown, Highway 1 and Davis Road between SR 183 and Blanco Road are currently deficient. Note that the findings of this analysis are based on traffic counts and not model run analysis.

Table 10 shows the **No-Build** analysis results. As shown, seven of the roadway projects would operate at deficient LOS in 2035 conditions with planned land use development as contained in the AMBAG Regional Travel Demand Model.

Table 11 shows the **Future Deficiency Analysis** results. As shown, the effect of the completion of the 2014 Regional Transportation Plan projects on the FORA CIP is that the **No-Build** impacts are reduced from seven roadway project locations that are deficient to five roadway project locations.

Table 12 shows the **Build 2015 CIP** analysis results. As shown, with implementation of both the FORA CIP projects along with the 2014 Regional Transportation Plan roadway projects, many of the deficient roadway segments will be eliminated and only two roadways would operate at a LOS D/E by 2035 (however, these two LOS D/E roadways are within the margin of error to the acceptable LOS D; therefore, they have been coded as 'orange' on **Table 13**). Those two roadway segments are:

- Reservation Road would be operating at LOS D/E between Davis Road and Watkins Gate Road in the eastbound direction in the PM peak and in the westbound direction in the AM peak.
- Eastside Parkway would be operating at LOS D/E between Eucalyptus Road and Schoonover Drive in the westbound direction in the AM peak.

Table 13 shows the **Build Alternative CIP** analysis results. As shown, the only major difference between the **Build 2015 CIP** and the **Build Alternative CIP** is that Highway 1 is identified as being deficient. The reason for this deficiency appearing in the modeling is due to the fact that the proposed enhanced transit improvements for Highway 1 in the **Build Alternative CIP** are not modelable, and thus the results shown are strictly related to vehicle traffic and do not account for the potential reduction in traffic congestion from increased transit service. The following section on the "Highway 1 Widening Analysis" provides more discussion on this issue.



Table 14 shows the results of LOS for Select Non-FORA Roadways that have been identified as being of particular importance within the study area. Specifically, this exhibit shows the results of analysis for Imjin Parkway, Del Monte Boulevard, and Fremont Boulevard for **Existing Conditions, No-Build, Build 2015 CIP**, and **Build Alternative CIP**. As shown, only Imjin Parkway under the **No-Build** and the **Build 2015 CIP** has an identified deficiency.

Key Findings

Table 15 and **Table 16** provide a comparison of the **No-Build** and **Build Alternative CIP**; and the **Future Deficiency Analysis** and the **Build Alternative CIP**, respectively. As shown, the number of deficient roadway project locations decrease from seven under the **No-Build** and from five under the **Future Deficiency Analysis** to three periods of LOS D/E, which are within the acceptable margin of error, with implementation of the **Build Alternative CIP** (two under the **Build 2015 CIP**). This demonstrates that FORA CIP projects provide measurable improvement to the roadway network to address future development-related transportation deficiencies.



Table 9: Level of Service for Existing Conditions

Roadway	FORA Project Descriptions	Existing Conditions					
		Direction	AM	PM	Direction	AM	PM
Highway 1	4→6 Lanes (Fremont to Del Monte)	SB	C	D	NB	D	E
Monterey Rd Interchange	New Interchange @ Monterey Rd/Hwy 1	SBOff	N/A	N/A	NB Off	N/A	N/A
		SB On	N/A	N/A	NB On	N/A	N/A
Highway 156	4 Lane Freeway	EB	B	C	WB	B	B
Highway 68	Operational Improvements	EB	A	C	WB	B	B
Davis Road	4 Lanes SR-183→Blanco Rd	SB	C	C	NB	C	E
Davis Road	4 Lanes Blanco Rd→Reservation Rd	NB	A	A	SB	A	A
Reservation Road	4 Lanes East Garrison Gate→Watkins Gate	EB	A	A	WB	A	A
Reservation Road	4 Lanes Watkins Gate→Davis Rd	EB	A	A	WB	A	A
8th Street ⁽¹⁾	2 Lanes 2nd Ave→Intergarrison Rd	EB	A	A	WB	B	A
2nd Avenue	2 Lanes Imjijn Parkway→Del Monte Blvd	EB	N/A	N/A	WB	N/A	N/A
Inter-Garrison ⁽¹⁾	4 Lanes Eastside Pkwy→Reservation Rd	WB/SB	B	B	EB/NB	B	B
Gigling Road ⁽¹⁾	4 Lanes General Jim Moore Blvd→Eastside Rd	EB	A	A	WB	A	A
General Jim Moore Blvd	2→4 Lanes Normandy Rd→McClure Way ✓	SB	A	A	NB	A	A
General Jim Moore Blvd	2→4 Lanes McClure Way→Coe Ave ✓	SB	A	A	NB	A	A
General Jim Moore Blvd	2→4 Lanes Coe Ave→S Boundary Rd ✓	SB	B	A	NB	A	B
Salinas Avenue	2 Lanes Reservation Rd→Abrams Dr	SB	N/A	N/A	NB	N/A	N/A
Eucalyptus Road ⁽¹⁾	2 Lanes General Jim Moore Blvd→Parker Flats ✓	WB	A	A	EB	A	A
Eastside Parkway	2 Lanes Eucalyptus Rd→Schoonover Dr	WB	N/A	N/A	EB	N/A	N/A
South Boundary ⁽²⁾	2 Lanes General Jim Moore Blvd→York Blvd	EB	C	D	WB	C	D
Imjijn Parkway ⁽¹⁾	4 Lane Minor Arterial	WB	D	B	EB	B	D
Del Monte Blvd ⁽¹⁾	4 Lane Principal Arterial	NB	A	A	SB	A	A
Fremont Blvd ⁽¹⁾	4 Lane Minor Arterial	NB	A	A	SB	A	A
	(1) LOS based on base year model volumes due to the lack of traffic counts						
	(2) LOS based on traffic volumes from the 2005 study due to the lack of traffic counts						
	Check mark indicates that the project has been constructed.						

Table 10: Level of Service for No-Build– (at horizon year 2035)

Roadway	FORA Project Descriptions	No-Build					
		Direction	AM	PM	Direction	AM	PM
Highway 1	4→6 Lanes (Fremont to Del Monte)	SB	C	E	NB	E	F
Monterey Rd Interchange	New Interchange @ Monterey Rd/Hwy 1	SB Off	N/A	N/A	NB Off	N/A	N/A
		SBO n	N/A	N/A	NB On	N/A	N/A
Highway 156	4 Lane Freeway	EB	C	E	WB	E	C
Highway 68	Operational Improvements	EB	B	D	WB	C	C
Davis Road	4 Lanes SR-183→Blanco Rd	SB	E	D	NB	C	F
Davis Road	4 Lanes Blanco Rd→Reservation Rd	NB	B	C	SB	B	B
Reservation Road	4 Lanes East Garrison Gate→Watkins Gate	EB	A	C	WB	B	B
Reservation Road	4 Lanes Watkins Gate→Davis Rd	EB	B	E	WB	E	C
8th Street	2 Lanes 2nd Ave→Intergarrison Rd	EB	B	C	WB	C	B
2nd Avenue	2 Lanes Imjin Parkway→Del Monte Blvd	EB	N/A	N/A	WB	N/A	N/A
Inter-Garrison	4 Lanes Eastside Pkwy→Reservation Rd	WB/SB	E	C	EB/NB	B	E
Gigling Road	4 Lanes General Jim Moore Blvd→Eastside Rd	EB	C	E	WB	E	C
General Jim Moore Blvd	2→4 Lanes Normandy Rd→McClure Way ✓	SB	A	B	NB	B	A
General Jim Moore Blvd	2→4 Lanes McClure Way→Coe Ave ✓	SB	A	B	NB	A	A
General Jim Moore Blvd	2→4 Lanes Coe Ave→S Boundary Rd ✓	SB	B	B	NB	A	B
Eucalyptus Road	2 Lanes General Jim Moore Blvd→Parker Flats ✓	WB	A	A	EB	A	A
Eastside Parkway	2 Lanes Eucalyptus Rd→Schoonover Dr	WB	N/A	N/A	EB	N/A	N/A
South Boundary	2 Lanes General Jim Moore Blvd→York Blvd	EB	B	E	WB	C	E
Imjin Parkway	4 Lane Minor Arterial	WB	F	D	EB	C	F
Del Monte Blvd	4 Lane Principal Arterial	NB	A	A	SB	A	A
Fremont Blvd	4 Lane Minor Arterial	NB	A	A	SB	A	A

Check mark indicates that the project has been constructed.

Table 11: Level of Service for Future Deficiency Analysis – (at horizon year 2035)

Roadway	FORA Project Descriptions	Future Deficiency Analysis					
		Direction	AM	PM	Direction	AM	PM
Highway 1	4→6 Lanes (Fremont to Del Monte)	SB	C	E	NB	E	F
Monterey Rd Interchange	New Interchange @ Monterey Rd/Hwy 1	SB Off	N/A	N/A	NB Off	N/A	N/A
		SB On	N/A	N/A	NB On	N/A	N/A
Highway 156	4 Lane Freeway	EB	E	C	WB	C	E
Highway 68	Operational Improvements	EB	A	D	WB	C	B
Davis Road	4 Lanes SR-183→Blanco Rd	SB	D	D	NB	C	E
Davis Road	4 Lanes Blanco Rd→Reservation Rd	NB	B	C	SB	B	B
Reservation Road	4 Lanes East Garrison Gate→Watkins Gate	EB	A	C	WB	B	B
Reservation Road	4 Lanes Watkins Gate→Davis Rd	EB	B	E	WB	E	C
8th Street	2 Lanes 2nd Ave→Intergarrison Rd	EB	B	B	WB	B	B
2nd Avenue	2 Lanes Imjin Parkway→Del Monte Blvd	EB	N/A	N/A	WB	N/A	N/A
Inter-Garrison	4 Lanes Eastside Pkwy→Reservation Rd	WB/SB	D	B	EB/NB	B	D
Gigling Road	4 Lanes General Jim Moore Blvd→Eastside Rd	EB	C	E	WB	E	C
General Jim Moore Blvd	2→4 Lanes Normandy Rd→McClure Way ✓	SB	A	C	NB	B	A
General Jim Moore Blvd	2→4 Lanes McClure Way→Coe Ave ✓	SB	A	B	NB	B	A
General Jim Moore Blvd	2→4 Lanes Coe Ave→S Boundary Rd ✓	SB	B	B	NB	A	B
Eucalyptus Road	2 Lanes General Jim Moore Blvd→Parker Flats ✓	WB	A	A	EB	A	A
Eastside Parkway	2 Lanes Eucalyptus Rd→Schoonover Dr	WB	N/A	N/A	EB	N/A	N/A
South Boundary	2 Lanes General Jim Moore Blvd→York Blvd	EB	B	E	WB	C	E

Check mark indicates that the project has been constructed.

Table 12: Level of Service for Build 2015 CIP – (at horizon year 2035)

Roadway	FORA Project Descriptions	Build 2015 CIP					
		Direction	AM	PM	Direction	AM	PM
Highway 1	4→6 Lanes (Fremont to Del Monte)	SB	C	D	NB	D	D
Monterey Rd Interchange	New Interchange @ Monterey Rd/Hwy 1	SB Off	A	A	NB Off	A	A
		SB On	A	A	NB On	A	A
Highway 156	4 Lane Freeway	EB	B	C	WB	C	B
Highway 68	Operational Improvements	EB	A	C	WB	B	B
Davis Road	4 Lanes SR-183→Blanco Rd	SB	D	C	NB	B	D
Davis Road	4 Lanes Blanco Rd→Reservation Rd	NB	B	D	SB	D	B
Reservation Road	4 Lanes East Garrison Gate→Watkins Gate	EB	B	D	WB	D	B
Reservation Road	4 Lanes Watkins Gate→Davis Rd	EB	B	E	WB	E	C
8th Street	2 Lanes 2nd Ave→Intergarrison Rd	EB	A	A	WB	B	A
2nd Avenue	2 Lanes Imjin Parkway→Del Monte Blvd	EB	A	A	WB	A	A
Inter-Garrison	4 Lanes Eastside Pkwy→Reservation Rd	WB/SB	D	C	EB/NB	C	D
Gigling Road	4 Lanes General Jim Moore Blvd→Eastside Rd	EB	C	C	WB	C	C
General Jim Moore Blvd	2→4 Lanes Normandy Rd→McClure Way ✓	SB	A	B	NB	B	A
General Jim Moore Blvd	2→4 Lanes McClure Way→Coe Ave ✓	SB	A	B	NB	A	A
General Jim Moore Blvd	2→4 Lanes Coe Ave→S Boundary Rd ✓	SB	B	C	NB	C	B
Eucalyptus Road	2 Lanes General Jim Moore Blvd→Parker Flats ✓	WB	B	B	EB	B	B
Eastside Parkway	2 Lanes Eucalyptus Rd→Schoonover Dr	WB	E	C	EB	C	D
South Boundary	2 Lanes General Jim Moore Blvd→York Blvd	EB	B	B	WB	B	B
Imjin Parkway	4 Lane Minor Arterial	WB	E	C	EB	C	D
Del Monte Blvd	4 Lane Principal Arterial	NB	A	A	SB	A	A
Fremont Blvd	4 Lane Minor Arterial	NB	A	A	SB	A	A

Check mark indicates that the project has been constructed.

Table 13: Level of Service for Build Alternative CIP – (at horizon year 2035)

Roadway	FORA Project Descriptions	Build Alternative CIP					
		Direction	AM	PM	Direction	AM	PM
Highway 1	4→6 Lanes (Fremont to Del Monte)	SB	C	E	NB	E	F
Monterey Rd Interchange	New Interchange @ Monterey Rd/Hwy 1	SB Off	A	A	NB Off	A	A
		SB On	A	A	NB On	A	A
Highway 156	4 Lane Freeway	EB	B	C	WB	C	B
Highway 68	Operational Improvements	EB	A	C	WB	B	B
Davis Road	4 Lanes SR-183→Blanco Rd	SB	D	C	NB	C	D
Davis Road	4 Lanes Blanco Rd→Reservation Rd	NB	B	C	SB	C	B
Reservation Road	4 Lanes East Garrison Gate→Watkins Gate	EB	B	C	WB	C	B
Reservation Road	4 Lanes Watkins Gate→Davis Rd	EB	B	E	WB	E	C
8th Street	2 Lanes 2nd Ave→Intergarrison Rd	EB	A	A	WB	A	A
2nd Avenue	2 Lanes Imjin Parkway→Del Monte Blvd	EB	C	A	WB	A	A
Inter-Garrison	4 Lanes Eastside Pkwy→Reservation Rd	WB/SB	D	B	EB/NB	B	D
Gigling Road	4 Lanes General Jim Moore Blvd→Eastside Rd	EB	B	B	WB	B	B
General Jim Moore Blvd	2→4 Lanes Normandy Rd→McClure Way ✓	SB	B	B	NB	B	B
General Jim Moore Blvd	2→4 Lanes McClure Way→Coe Ave ✓	SB	A	B	NB	A	B
General Jim Moore Blvd	2→4 Lanes Coe Ave→S Boundary Rd ✓	SB	C	C	NB	B	C
Eucalyptus Road	2 Lanes General Jim Moore Blvd→Parker Flats ✓	WB	B	B	EB	B	B
Eastside Parkway	2 Lanes Eucalyptus Rd→Schoonover Dr	WB	E	C	EB	C	D
South Boundary	2 Lanes General Jim Moore Blvd→York Blvd	EB	C	B	WB	B	C

Check mark indicates that the project has been constructed.



Table 14: Level of Service for Select Non-FORA Roadways

Roadway	Existing Conditions						No-Build					
	Dir	AM	PM	Dir	AM	PM	Dir	AM	PM	Dir	AM	PM
Imjin Parkway ⁽¹⁾	WB	D	B	EB	B	D	WB	F	D	EB	C	F
Del Monte Blvd ⁽¹⁾	NB	A	A	SB	A	A	NB	A	A	SB	A	A
Fremont Blvd ⁽¹⁾	NB	A	A	SB	A	A	NB	A	A	SB	A	A
Roadway	Future Deficiency Analysis						Build Alternative CIP					
	Dir	AM	PM	Dir	AM	PM	Dir	AM	PM	Dir	AM	PM
Imjin Parkway ⁽¹⁾	WB	E	C	EB	C	E	WB	D	C	EB	C	D
Del Monte Blvd ⁽¹⁾	NB	A	A	SB	A	A	NB	A	A	SB	A	A
Fremont Blvd ⁽¹⁾	NB	A	A	SB	A	A	NB	A	A	SB	A	A

(1) LOS based on base year model volumes due to the lack of traffic counts

Table 15: Comparison: No-Build vs Build Alternative CIP

Roadway	FORA Project Descriptions	Direction		No-Build		Build Alternative CIP		Direction		No-Build		Build Alternative CIP	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Highway 1	4→6 Lanes (Fremont to Del Monte)	SB	EB	C	E	C	E	EB	EB	E	F	E	F
Monterey Rd Interchange	New Interchange @ Monterey Rd/Hwy 1	SB Off	N/A	N/A	N/A	A	A	NB Off	N/A	N/A	N/A	A	A
		SB On	N/A	N/A	N/A	A	A	NB On	N/A	N/A	N/A	A	A
Highway 156	4 Lane Freeway	EB	C	C	E	B	C	WB	E	C	C	C	B
Highway 68	Operational Improvements	EB	B	D	D	A	C	WB	C	C	C	B	B
Davis Road	4 Lanes SR-183→Blanco Rd	SB	E	D	D	C	C	NB	C	F	C	C	D
Davis Road	4 Lanes Blanco Rd→Reservation Rd	NB	B	C	C	B	C	SB	B	B	C	C	B
Reservation Road	4 Lanes East Garrison Gate→Watkins Gate	EB	A	C	C	B	C	WB	B	B	C	C	B
Reservation Road	4 Lanes Watkins Gate→Davis Rd	EB	B	E	E	B	E	WB	E	C	C	E	C
8th Street	2 Lanes 2nd Ave → Intergarrison Rd	EB	B	C	C	A	A	WB	C	B	B	A	A
2nd Avenue	2 Lanes Imjin Parkway → Del Monte Blvd	EB	N/A	N/A	N/A	C	A	WB	N/A	N/A	A	A	A
Inter-Garrison	4 Lanes Eastside Pkwy → Reservation Rd	WB/SB	E	C	C	D	B	EB/NB	B	E	B	B	D
Gigling Road	4 Lanes General Jim Moore Blvd → Eastside Rd	EB	C	C	E	B	B	WB	E	C	C	B	B
General Jim Moore Blvd	2→4 Lanes Normandy Rd → McClure Way ✓	SB	A	B	B	B	B	NB	B	A	A	B	B
General Jim Moore Blvd	2→4 Lanes McClure Way → Coe Ave ✓	SB	A	B	B	A	B	NB	A	A	A	A	B
General Jim Moore Blvd	2→4 Lanes Coe Ave → S Boundary Rd ✓	SB	B	B	B	C	C	NB	A	B	B	B	C
Eucalyptus Road	2 Lanes General Jim Moore Blvd → Parker Flats ✓	WB	A	A	A	B	B	EB	A	A	A	B	B
Eastside Parkway	2 Lanes Eucalyptus Rd → Schoonover Dr	WB	N/A	N/A	N/A	E	C	EB	N/A	N/A	N/A	C	D
South Boundary	2 Lanes General Jim Moore Blvd → York Blvd	EB	B	E	E	C	B	WB	C	E	B	B	C

Check mark indicates that the project has been constructed.

Table 16: Comparison: Future Deficiency Analysis vs Build Alternative CIP

Roadway	FORA Project Descriptions	Direction	Future Deficiency Analysis		Build Alternative CIP		Direction	Future Deficiency Analysis		Build Alternative CIP	
			AM	PM	AM	PM		AM	PM	AM	PM
Highway 1	4→6 Lanes (Fre mont to De l Monte)	SB	C	E	C	E	NB	E	F	E	F
Monterey Rd Interchange	New Interchange @ Monterey Rd/Hwy 1	SB Off	N/A	N/A	A	A	NB Off	N/A	N/A	A	A
		SB On	N/A	N/A	A	A	NB On	N/A	N/A	A	A
Highway 156	4 Lane Freeway	EB	E	C	B	C	WB	C	E	C	B
Highway 68	Operational Improvements	EB	A	D	A	C	WB	C	B	B	B
Davis Road	4 Lanes SR-183→Blanco Rd	SB	D	D	D	C	NB	C	E	C	D
Davis Road	4 Lanes Blanco Rd→Reservation Rd	NB	B	C	B	C	SB	B	B	C	B
Reservation Road	4 Lanes East Garrison Gate→Watkins Gate	EB	A	C	B	C	WB	B	B	C	B
Reservation Road	4 Lanes Watkins Gate→Davis Rd	EB	B	E	B	E	WB	E	C	E	C
8th Street	2 Lanes 2nd Ave→Intergarrison Rd	EB	B	B	A	A	WB	B	B	A	A
2nd Avenue	2 Lanes Imjin Parkway→De l Monte Blvd	EB	N/A	N/A	C	A	WB	N/A	N/A	A	A
Inter-Garrison	4 Lanes Eastside Pkwy→Reservation Rd	WB/SB	D	B	D	B	EB/NB	B	D	B	D
Gigling Road	4 Lanes General Jim Moore Blvd→Eastside Rd	EB	C	E	B	B	WB	E	C	B	B
General Jim Moore Blvd	2→4 Lanes Normandy Rd→McClure Way ✓	SB	A	C	B	B	NB	B	A	B	B
General Jim Moore Blvd	2→4 Lanes McClure Way→Coe Ave ✓	SB	A	B	A	B	NB	B	A	A	B
General Jim Moore Blvd	2→4 Lanes Coe Ave→S Boundary Rd ✓	SB	B	B	C	C	NB	A	B	B	C
Eucalyptus Road	2 Lanes General Jim Moore Blvd→Parker Flats ✓	WB	A	A	B	B	EB	A	A	B	B
Eastside Parkway	2 Lanes Eucalyptus Rd→Schoonover Dr	WB	N/A	N/A	E	C	EB	N/A	N/A	C	D
South Boundary	2 Lanes General Jim Moore Blvd→York Blvd	EB	B	E	C	B	WB	C	E	B	C

Check mark indicates that the project has been constructed.



Additional Model Outputs

The graphics below (**Figure 5** to **Figure 8**) present the resultant volume change for the **Build 2015 CIP** and **Build Alternative CIP**, respectively, as compared to the **Future Deficiency Analysis**. Note that in some instances, volume changes could not easily be displayed given that the coding of some improvements resulted in changes to the unique identifiers that were the basis for calculation. The importance of **Figures 5** through **8** is that they demonstrate the impact that the FORA CIP projects have on the roadway network in the context of the existing Regional Transportation Plan. In these exhibits, roadways marked in blue show an increase of at least 500 vehicle trips per day, while roadways marked in orange show a decrease of at least 500 vehicle trips per day. What this demonstrates is how traffic shifts around the study area with the completion of the FORA CIP projects, particularly with vehicle trips moving away from the center of the study area and onto improved roadways, such as Eastside Parkway.

Figure 6: ADT Volume Shifts Resultant from Build 2015 CIP – Marina and Salinas

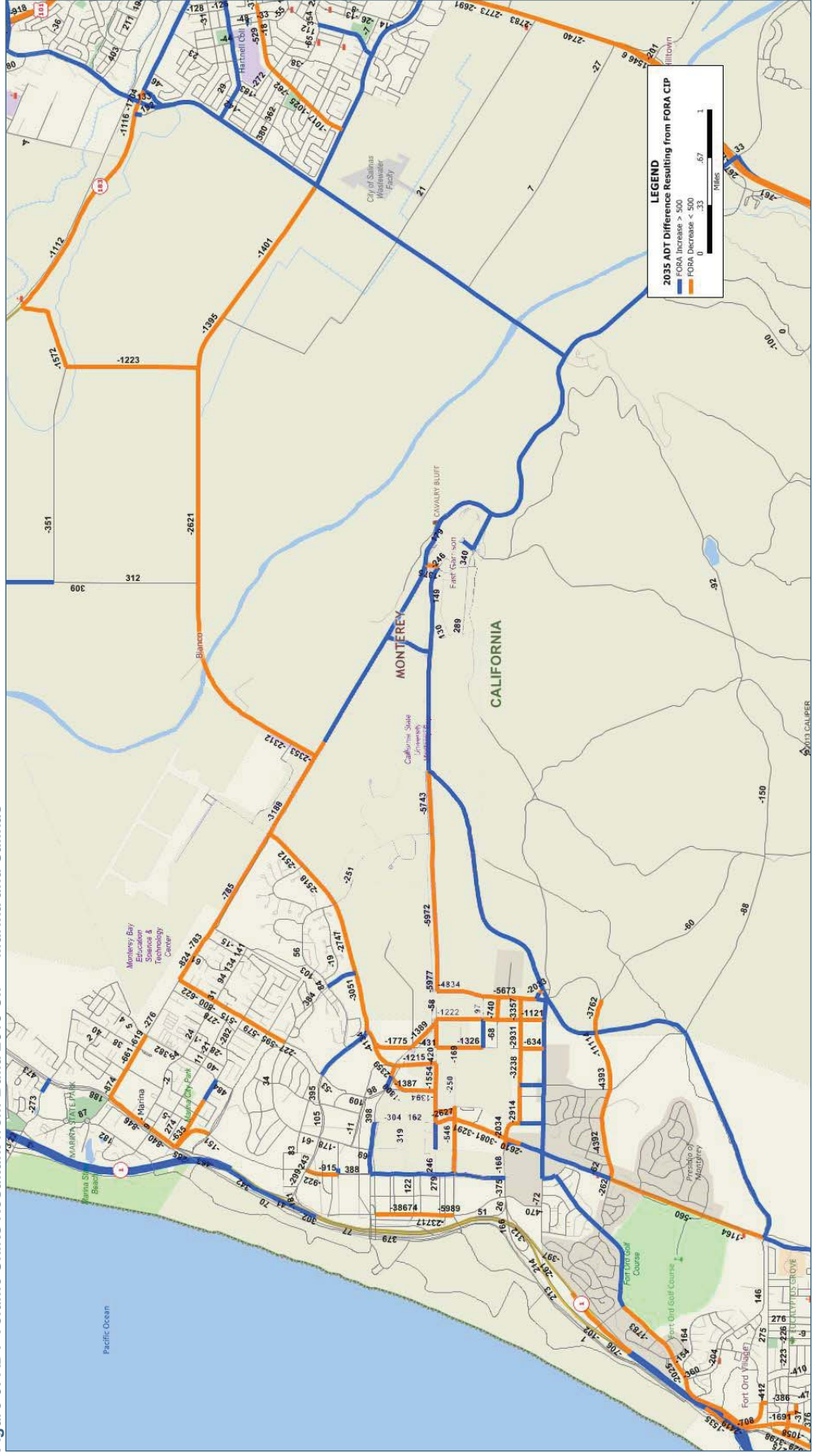
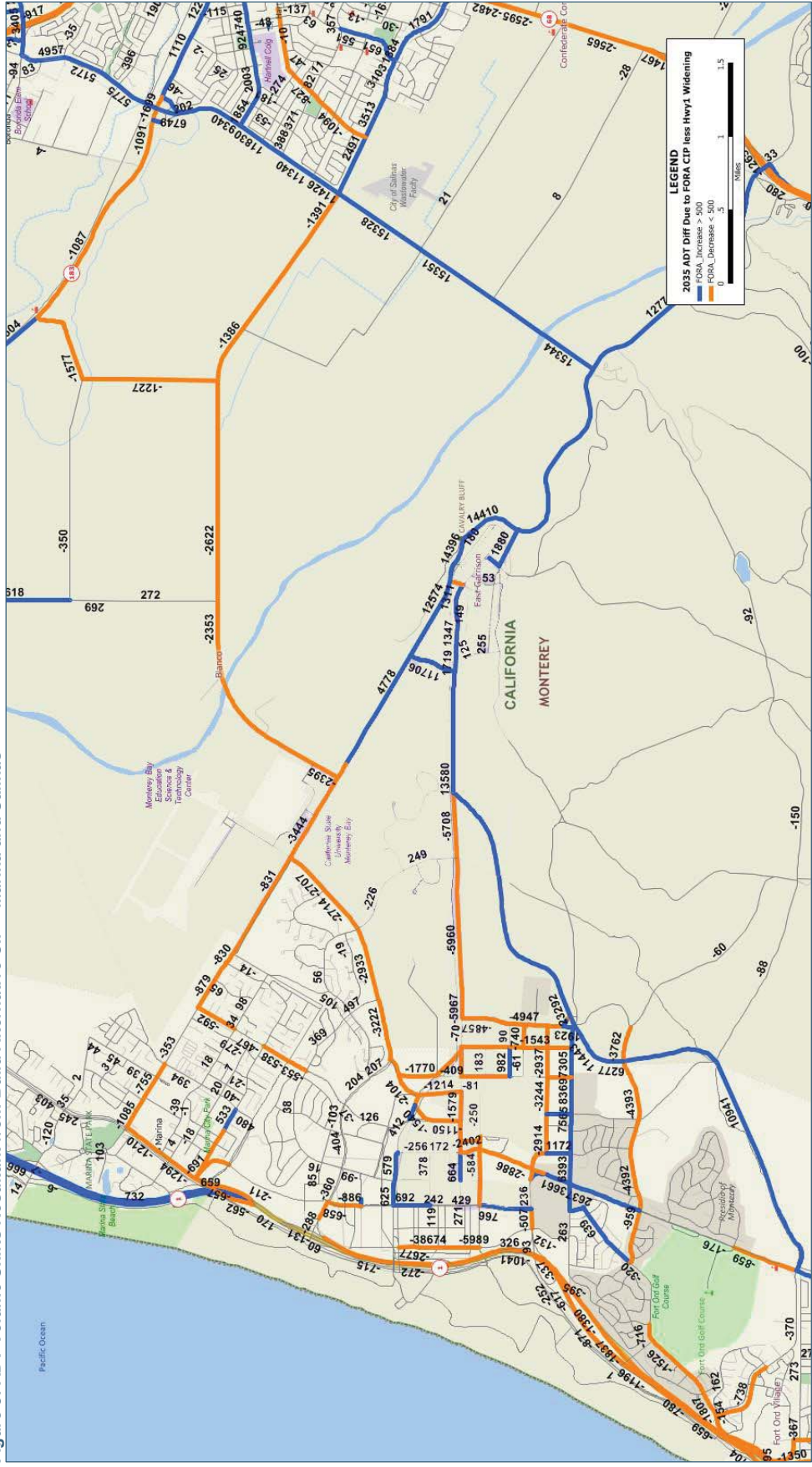


Figure 7: ADT Volume Shifts Resultant from Build Alternative CIP – Seaside and Monterey



Figure 8: ADT Volume Shifts Resultant from Build Alternative CIP – Marina and Salinas





Highway 1 Widening Analysis

Due to costs and other constraints of widening Highway 1 between Fremont Boulevard and Del Monte Del Monte, the **Build Alternative CIP** was considered that provides enhanced transit service, as well as interchange and roadway operational improvements. Although a detailed plan was not developed as part of this analysis, conceptual transit improvements were identified for which preliminary analysis was completed. The identified conceptual transit improvements included Bus-On-Shoulder operations along Highway 1 and enhanced transit service along corridors that carry traffic that would otherwise be accommodated by Highway 1 widening. Enhanced transit service could include improvements to the Monterey Branch Line, Bus Rapid Transit, and local Monterey-Salinas Transit service through the provision of new service, increased headways, and/or improved connectivity through realignment or the introduction of new routes. In order to reasonably characterize the potential benefits of transit to Highway 1 traffic and the FORA project the following activities were undertaken:

- Analysis was completed to determine changes in transit boarding under the condition without the proposed Highway 1 widening project. Note that this analysis did not consider the implications of enhanced transit service being provided (based on current model coding).
- Volume difference plots to compare traffic volumes with and without the proposed Highway 1 widening were completed.
- Select link analysis with and without the proposed Highway 1 widening were completed.
- Future and base model output was analyzed to determine the overall and localized changes related to transit service. This analysis was used to determine the overall percentage growth in transit boarding in Monterey County.
- A literature review related to bus on shoulder impacts was completed in order to assess potential growth based on real world experience.
- A determination of impacts to other potential FORA projects based on analysis of a future condition where all other projects were constructed and the Highway 1 widening was not was completed.

The major findings from this analysis included:

- Approximately 70% of the traffic that would have otherwise been accommodated by a Highway 1 Widening could be accommodated by Del Monte Boulevard, Fremont Boulevard, and General Jim Moore Boulevard.



- **Table 17** shows the relative distribution of traffic that uses Highway 1 in the area of the potential widening. As shown, there is strong connectivity between destinations along Highway extending from Carmel-by-the-Sea to the south all the way to Santa Cruz to the north. This section of Highway 1 also has numerous origins/destinations to the east, extending out past Prunedale along SR 156. This information is useful for understanding the extent of trips that potential transit improvements would need to consider.

Table 17: Resultant Traffic Shift if Highway 1 is not Widened (Build 2015 CIP vs Build Alternative CIP)

Facility	Not Widening Hwy 1 vs Widening		
	AM Diff	PM Diff	Day Diff
Hwy 1	-950	-975	-8,725
Del Monte Blvd	550	575	4,875
Fremont Blvd	50	50	225
Gen Jim Moore	75	75	775

- As shown in **Table 18**, transit ridership is forecasted to continue to increase between 2010 and 2035. This increase suggests that additional opportunities to capture transit ridership exist into the future as a result of already planned improvements and anticipated growth. Corridor specific analysis would be required to more accurately forecast potential ridership related to transit improvements along Highway 1 and elsewhere.

Table 18: AMBAG Regional Travel Demand Model Forecasted Transit Ridership in Monterey County (2010-2035)

Year	Peak	Off-Peak
2010	6,600	7,900
2035	8,300	9,700
Change	126%	123%



NEXUS ANALYSIS

Although the FORA Community Facilities District Special Tax is technically a Mello-Roos Special Tax, the original cost allocation in 1997 was done as a development impact fee nexus analysis. The consultants have taken the same approach as a starting point here. For those projects where there are existing deficiencies (LOS E or F in the Base Year), the nexus calculation needs to separate the cost share for existing development from that of new development. For the purpose of maintaining consistency with prior work, the cost obligation maintained 2005 as the basis for determining existing deficiency. This avoids substantial changes in FORA funding prioritizations that might otherwise occur as the result of new improvements or other circumstances that could change the results of the existing deficiency analysis. Four projects were previously determined to have existing deficiencies in the 2005 Base Year: Highway 68, Highway 156, Davis n/o Blanco, and Highway 1 at Monterey Road where a new interchange is planned.

The fee calculations for these projects first deduct the amount of project cost attributable to existing traffic. For all the other projects, new development is assigned 100 percent of the cost, since no LOS deficiencies exists in the Base Year. The FORA allocation, therefore, reflects the share of trips generated by new development at the former Fort Ord compared to new development elsewhere.

Based on the travel demand modeling previously completed as part of this study and the 2005 existing conditions deficiency analysis, the fair share determinations shown in **Table 19** were determined. **Table 20**, **Table 21**, and **Table 22** present a comparative analysis of the adopted 2005 Study Option B: Fund Local Projects First with the 2016 analysis reflecting a Nexus only analysis (Option A). As shown, the 2016 analysis considers the impact of a revised project cost estimate using the Engineering News Record Construction Cost Index between January 2005 and January 2016. Recognizing that the total FORA obligation can not be increased beyond that originally established in the 2005 study (allowing for annual Construction Cost Index increases), the results of the fair share analysis were used as the basis for establishing a weighting methodology such that the total financial obligation for the projects in aggregate remained the same. Note that this weighting scheme excludes General Jim Boulevard given its nearly complete status and 2nd Avenue given that it was added as a reallocation of funds from the Crescent Avenue project. It is anticipated that this initial starting point will be further refined based on direction from the FORA Board and local jurisdictions.

Table 19: FORA 2016 Reallocation Based on Build Alternative CIP

Project #	Road Name	Project Limits	2005 Study Existing Deficiency	Project Growth in I-Trips	Non-Project Growth in X-Trips	Project Total Traffic Growth	2035 Raw Model	2010 Raw Model	2005-2010 Raw Model	2017 Study Existing Nexus Share Deficiency)	2017 Study Non-FORA Nexus Share	2017 Study FORA Nexus Share
Regional Improvements												
R3	Highway 1 Corridor	Corridor improvements and enhanced transit service along corridors which will carry traffic that would otherwise be accommodated by Highway 1 widening		0	17,178	0	80,271	68,231	12,040	0.0%	0.0%	100.0%
R10	Highway 1/Monterey Rd	Construct new interchange at Monterey Road	Yes	0	799	2,115	2,915	0	2,915	0.0%	72.6%	27.4%
R11	Highway 156	Widen existing highway to 4 lanes and upgrade highway to freeway status with appropriate interchanges. Interchange modification as needed at US 156 and 101.	Yes	0	7,391	20,857	41,758	13,510	28,248	32.4%	49.9%	17.7%
R12	Highway 68	Operational improvements at San Benancio, Laureles Grade and at Corral De Tierra including left turn lanes and improved signal timing.	Yes	0	1,524	245	31,049	29,279	1,769	94.3%	0.8%	4.9%
Off-Site Improvements												
1	Davis Road	Widen to 4 lanes from SR 183 bridge to Blanco Rd	Yes	0	10,699	3,120	34,520	20,700	13,819	60.0%	9.0%	31.0%
2B	Davis Road	Widen to 4 lanes from Blanco to Reservation. Build 4 lane bridge over Salinas River		0	15,351	6,053	31,500	10,096	21,404	0.0%	28.3%	71.7%
4D	Reservation Road	Widen to 4 lanes from existing 4 lane section East Garrison Gate to Walkins Gate.		0	15,316	2,204	28,797	11,278	17,520	0.0%	12.6%	87.4%
4E	Reservation Road	Widen to 4 lanes from Walkins Gate to Davis Rd		0	17,925	5,359	34,562	11,278	23,284	0.0%	23.0%	77.0%
8	Crescent Court	Extend existing Crescent Court. Southerly to join proposed Abram Dr. (FO2)		0	50	325	375	0	375	0.0%	86.6%	13.4%
On-Site Improvements												
FO2	Abrams Road	Construct a new 2-lane arterial from intersection with 2nd Ave easterly to intersection with Crescent Court Extension *		0	200	27	226	0	226	0.0%	11.8%	88.2%
FO5	8th Street	Upgrade/construct new 2-lane arterial from 2nd Ave to Intergrarrison Rd		1,265	1,695	0	4,327	3,632	695	0.0%	0.0%	100.0%
FO6	Inter-Garrison	Upgrade to a 4-lane arterial from Eastside Rd to Reservation		1,454	11,392	3,331	22,643	6,466	16,177	0.0%	20.6%	79.4%
FO7	Gigling Road	Upgrade/construct new 4-lane arterial from General Jim Moore Blvd easterly to Eastside Rd		2,859	10,848	582	15,532	1,244	14,288	0.0%	4.1%	95.9%
FO9B (PH-I)	General Jim Moore Blvd	Widen from 2 to 4 lanes from Normandy to McClure		2,384	9,908	0	15,175	3,996	11,179	0.0%	0.0%	100.0%
FO9B (PH-III)	General Jim Moore Blvd	Widen from 2 to 4 lanes from McClure to Cue Ave		1,206	8,786	0	13,460	5,360	8,100	0.0%	0.0%	100.0%
FO9C	General Jim Moore Blvd	Widen from 2 to 4 lanes from so Coe to South Boundary Rd		1,891	12,132	4,458	22,378	3,897	18,482	0.0%	24.1%	75.9%
FO11	Salinas Avenue	Construct new 2 lane arterial from Reservation Rd southerly to Abrams Dr		0	30	0	177	205	-27	0.0%	0.0%	100.0%
FO12	Eucalyptus Road	Upgrade to 2 lane collector from General Jim Moore Blvd to Eastside Rd to Parker Flats cut-off		686	3,453	5,102	9,241	0	9,241	0.0%	55.2%	44.8%
FO13B	Eastside Parkway	Construct new 2 lane arterial from Eucalyptus Rd to Parker Flats cut-off to Schoonover Dr		1,358	10,363	6,864	18,586	0	18,586	0.0%	36.9%	63.1%
FO14	South Boundary	Upgrade to a 2 lane arterial, along existing alignment from General Jim Moore Blvd to York Blvd		1,891	13,602	3	15,496	0	15,496	0.0%	0.0%	100.0%
FO15	2nd Avenue	Construct new 2 lane arterial from Del Monte Blvd southerly to Injijn Pkwy		0	3,422	640	4,061	0	4,061	0.0%	15.8%	84.2%

Table 20: Option A – CAP Adjusted Nexus

Option A - Nexus, Adjusted to Implementation Agreement Cap									
Total Transportation Obligation (Fixed by Implementation Agreement, Indexed to 2016 Dollars)									
Proj	Description	BRP Designation	% New Trips	2016 Indexed Construction Estimate		Nexus	% of Total	Cap Adjusted Nexus	TOTAL
			A	B	D= [A x B]	D/E		114,195,961	\$ 114,195,961
In-Progress Obligations / Fixed Amount									
2B	Davis Rd s/o Blanco	Off-Site	100.0%	\$ 12,733,317	\$ 12,733,316.71	\$ 7,129,343	6.2%	\$ 7,129,343	
F09C	GJM Blvd-to 218	On-Site	100.0%	\$ 1,083,775	\$ 1,083,774.94	\$ 606,802	0.5%	\$ 606,802	
F012	Eucalyptus Rd	On-Site	100.0%	\$ 532,830	\$ 532,830.00	\$ 298,330	0.3%	\$ 298,330	
Local Improvements									
8	Crescent Ave extend to Abrams	Off-Site	13.0%	\$ 1,346,475.00	\$ 175,042	\$ 98,005	0.1%	\$ 98,005	Completed
F02	Abrams	On-Site	88.0%	\$ 1,127,673.00	\$ 992,352	\$ 555,615	0.5%	\$ 555,615	
F05	8th Street	On-Site	100.0%	\$ 6,443,262.00	\$ 6,443,262	\$ 3,607,562	3.2%	\$ 3,607,562	
F06	Intergarrison	On-Site	79.0%	\$ 6,324,492.00	\$ 4,996,349	\$ 2,797,440	2.4%	\$ 2,797,440	
F07	Gigling	On-Site	96.0%	\$ 8,495,961.00	\$ 8,156,123	\$ 4,566,587	4.0%	\$ 4,566,587	
F011	Sailmas Ave	On-Site	100.0%	\$ 4,510,693.00	\$ 4,510,693	\$ 2,525,523	2.2%	\$ 2,525,523	
F013B	Eastside Pkwy (New alignment)	On-Site	63.0%	\$ 18,611,779.00	\$ 11,725,421	\$ 6,565,026	5.7%	\$ 6,565,026	
F014	S Boundary Road Upgrade	On-Site	100.0%	\$ 3,733,921.00	\$ 3,733,921	\$ 2,090,610	1.8%	\$ 2,090,610	
10	2nd Ave Extension	Off-Site	84.0%	\$ -	\$ 847,000	\$ 474,233	0.4%	\$ 474,233	
Regional Improvements									
R3	Hwy 1-Seaside Sand City	Regional	100.0%	\$ 66,808,021.00	\$ 66,808,021	\$ 37,405,598	32.8%	\$ 37,405,598	
R10	Hwy 1-Monterey Rd. Interchange	Regional	27.5%	\$ 28,356,293.00	\$ 7,793,166	\$ 4,363,369	3.8%	\$ 4,363,369	
R11	Hwy 156-F reeway Upgrade	Regional	18.0%	\$ 292,470,673.00	\$ 52,644,721	\$ 29,475,611	25.8%	\$ 29,475,611	
R12	Hwy 68 Operational Improvements	Regional	5.0%	\$ -	\$ -	\$ -	-	\$ -	Completed
1	Davis Rd n/o Blanco	Off-Site	31.0%	\$ 4,678,046.00	\$ 1,450,194	\$ 811,959	0.7%	\$ 811,959	
4D	Widen Reservation-4 lanes to WG	Off-Site	87.0%	\$ 14,994,689.00	\$ 13,045,379	\$ 7,304,066	6.4%	\$ 7,304,066	
4E	Widen Reservation, WG to Davis	Off-Site	77.0%	\$ 8,165,424.00	\$ 6,287,376	\$ 3,520,282	3.1%	\$ 3,520,282	
				E = Nexus Sub-Total		\$ 203,958,942			
								OPTION A TOTAL	\$ (114,195,961)

Table 21: Option B – Local First

Option B - Local First (New, Local Improvements receive 100% funding)										
Total Transportation Obligation (Fixed by Implementation Agreement, Indexed to 2016 Dollars)										TOTAL
Proj	Description	BRP Designation	% New Trips	Attributed cost (to new traffic)	16 Indexed Construction Estim	Fee Basis	% Obligation	2017 \$ Obligation	\$ 114,195,961	
			A	B	C	D= [A x B x C]	E	[D x E]		
In-Progress Obligations / Fixed Amount										
Local Improvements										
2B	Davis Rd s/o Blanco	Off-Site	100%	-	\$ 12,733,317	\$ 12,733,317	100%	\$ 12,733,317	Completed	
F09C	GJM Blvd to 218	On-Site	100%	-	\$ 1,083,775	\$ 1,083,775	100%	\$ 1,083,775		
F012	Eucalyptus Rd	On-Site	100%	-	\$ 532,830	\$ 532,830	100%	\$ 532,830		
8	Crescent Ave extend to Abrams	Off-Site	100%	100%	\$ 1,346,475	\$ 1,346,475	100%	\$ 399,475		
F02	Abrams	On-Site	100%	100%	\$ 1,127,673	\$ 1,127,673	100%	\$ 1,127,673		
F05	8th Street	On-Site	100%	100%	\$ 6,443,262	\$ 6,443,262	100%	\$ 6,443,262		
F06	Intergarrison	On-Site	100%	100%	\$ 6,324,492	\$ 6,324,492	100%	\$ 6,324,492		
F07	Gigling	On-Site	100%	100%	\$ 8,495,961	\$ 8,495,961	100%	\$ 8,495,961		
F011	Sailmas Ave	On-Site	100%	100%	\$ 4,510,693	\$ 4,510,693	100%	\$ 4,510,693		
F013B	Eastside Pkwy (New alignment)	On-Site	100%	100%	\$ 18,611,779	\$ 18,611,779	100%	\$ 18,611,779		
F014	S Boundary Road Upgrade	On-Site	100%	100%	\$ 3,733,921	\$ 3,733,921	100%	\$ 3,733,921		
10	2nd Ave Extension	Off-Site	100%	100%	\$ -	\$ 947,000	100%	\$ 947,000		
Sub-Total of Local Improvements and In-Progress Obligations										Sub-Total
Total Transportation Obligation - (Less Local Improvements + In-Progress Obligations)										Remainder
Regional Improvements										\$ (64,944,178)
Proj	Description	Attributed cost	% New Trips	2016 Indexed Construction Estimate	Fee Basis	% of Remaining Obligation	2017 \$ Obligation			
		B	A	C	D = [A x B x C]	F = D / E	[F x \$49,251,783]			
R3	Hwy 1-Seaside Sand City	Regional	100.0%	\$ 66,808,021.00	\$ 12,607,122	27.5%	\$ 13,565,097			
R10	Hwy 1-Monterey Rd. Interchange	Regional	27.5%	\$ 28,356,293.00	\$ 3,349,716	7.3%	\$ 3,604,250			
R11	Hwy 156-Freeway Upgrade	Regional	18.0%	\$ 292,470,673.00	\$ 15,793,416	34.5%	\$ 16,993,507			
R12	Hwy 68 Operational Improvements	Regional	5.0%	\$ -	\$ -	-	\$ -	Completed		
1	Davis Rd n/o Blanco	Off-Site	31.0%	\$ 4,678,046.00	\$ 669,346	1.5%	\$ 720,208			
4D	Widen Reservation-4 lanes to WG	Off-Site	87.0%	\$ 14,994,689.00	\$ 8,727,134	19.1%	\$ 9,390,281			
4E	Widen Reservation, WG to Davis	Off-Site	77.0%	\$ 8,165,424.00	\$ 4,626,860	10.1%	\$ 4,978,440			
Sub-Total of Regional Improvements										Sub-Total
E = Fee Basis Sub-Total										\$ (49,251,783)
Sub-Total of Regional Improvements										OPTION B TOTAL
\$ 45,773,595										\$ (114,195,961)

Table 22: Option Comparison

Option Comparison						
Total Transportation Obligation (Fixed by Implementation Agreement, Indexed to 2016 Dollars) - \$114,195,961.00						
Project No.	Description	BRP Designation	2016-2017 FORA CIP	Option A: Cap Adjusted Nexus	Option B: Local First Distribution	
	Option Totals		\$ 106,904,495.00	114,195,961	114,195,961	
In-Progress Obligations / Fixed Amount			\$ 14,028,367	\$ 8,034,475	\$ 14,349,922	
2B	Davis Rd S/o Blanco	Off-Site	\$ 12,447,987.00	\$ 7,129,343	\$ 12,733,317	
F08C	GJM Blvd-to 218	On-Site	\$ 1,059,490.00	\$ 606,802	\$ 1,083,775	
F012	Eucalyptus Rd	On-Site	\$ 520,890.00	\$ 298,330	\$ 532,830	
Local Improvements			\$ 46,423,123	\$ 23,280,600	\$ 50,594,286	
8	Crescent Ave extend to Abrams	Off-Site	\$ 1,359,239.00	\$ 98,005	\$ 399,475	
F02	Abrams	On-Site	\$ 1,138,362.00	\$ 555,615	\$ 1,127,673	
F05	8th Street	On-Site	\$ 5,392,321.00	\$ 3,607,562	\$ 6,443,262	
F06	Intergarrison	On-Site	\$ 4,380,385.00	\$ 2,797,440	\$ 6,324,492	
F07	Gigling	On-Site	\$ 8,097,846.00	\$ 4,566,587	\$ 8,495,961	
F011	Sallinas Ave	On-Site	\$ 4,553,449.00	\$ 2,525,523	\$ 4,510,693	
F013B	Eastside Pkwy (New alignment)	On-Site	\$ 18,198,908.00	\$ 6,565,026	\$ 18,611,779	
F014	S Boundary Road Upgrade	On-Site	\$ 3,302,613.00	\$ 2,090,610	\$ 3,733,921	
F020	2nd Ave Extension	Off-Site	\$ -	\$ 474,233	\$ 947,000	
Regional Improvements			\$ 46,453,004	\$ 82,880,886	\$ 49,251,783	
R3	Hwy 1-Seaside Sand City	Regional	\$ 22,903,427.00	\$ 37,405,598	\$ 13,565,097	
R10	Hwy 1-Monterey Rd. Interchange	Regional	\$ 3,741,714.00	\$ 4,363,369	\$ 3,604,250	
R11	Hwy 156-Freeway Upgrade	Regional	\$ 10,629,001.00	\$ 29,475,611	\$ 16,993,507	
R12	Hwy 68 Operational Improvements	Regional	\$ -	\$ -	\$ -	
1	Davis Rd n/o Blanco	Off-Site	\$ 759,776.00	\$ 811,959	\$ 720,208	
4D	Widen Reservation-4 lanes to WG	Off-Site	\$ 5,097,496.00	\$ 7,304,066	\$ 9,390,281	
4E	Widen Reservation, WG to Davis	Off-Site	\$ 3,321,590.00	\$ 3,520,282	\$ 4,978,440	



CONCLUSION

Baseline conditions and future land use and transportation network assumptions have changed since TAMC completed the *2005 FORA Fee Reallocation Study*. The BRP also requires FORA and TAMC to monitor projected traffic levels within the FORA transportation network. For these reasons, FORA engaged with TAMC in completing the 2017 FORA Fee Reallocation Study. As part of their scope of work, Kimley-Horn completed the following tasks:

- a) Review/modify land use assumptions on former Fort Ord;
- b) Review/modify AMBAG Regional Travel Demand Model future network assumptions – including creating five scenarios for travel forecast analysis: **Existing Conditions**, **No-Build**, **Future Deficiency Analysis**, **Build 2015 CIP**, and **Build Alternative CIP**.

This study presented initial Deficiency Analysis results after running the roadway network scenarios with the AMBAG Regional Travel Demand Model. A key finding was that the **No-Build** scenario results in fifteen periods of deficiency (LOS E or F), whereas the **Build Alternative CIP** scenario results in five periods of LOS D/E (results within a margin of error of acceptable LOS D). These results demonstrated that the FORA CIP projects provide measurable improvement to the roadway network to address future development-related transportation deficiencies.

This study also analyzed transit improvements as potential alternatives to Highway 1 widening between Fremont Boulevard and Del Monte Boulevard and enhanced transit service along or parallel to Highway 1. This analysis found that approximately 70% of the traffic that would have otherwise been accommodated by a Highway 1 widening is anticipated to be accommodated by Del Monte Boulevard, Fremont Boulevard, and General Jim Moore Boulevard, with increased transit ridership projected in the future.

Recommendations

Based on these findings, Kimley-Horn recommends that FORA confirm the **Build Alternative CIP** transportation network as the same as the **Build 2015 CIP** transportation network with the following changes:

- Broaden the description of “regional” project R3a widening Highway 1 between Fremont Boulevard and Del Monte Boulevard to include adding new enhanced transit improvements and service (Bus on Shoulder or Monterey Branch Line Bus Rapid Transit, and Local Monterey-Salinas Transit Service), and improvements to the Highway 1 – Fremont Boulevard Interchange in Seaside; and
- Replace existing Marina FORA Fee projects with a new “off-site” project, 2nd Avenue, from Imjin Parkway to Del Monte Boulevard in Marina

It is further recommended that the cost reallocation included within this document as **Table 20** be used as the starting point for updating the FORA CIP Obligations, recognizing that it is likely that further adjustments will be necessary based on Fort Ord Reuse Authority and local



jurisdiction direction. In particular, the FORA Administrative Committee has recommended using Option B from **Table 21** as the basis for the reallocation.

April 17, 2012

Erin Harwayne
Denise Duffy & Associates, Inc.
947 Cass Street, Suite 5
Monterey, CA 93940

RE: Ford Ord Habitat Conservation Plan – Traffic Analysis

Dear Erin:

Hatch Mott MacDonald (HMM) has performed professional transportation engineering services related to the proposed Ford Ord Habitat Conservation Plan (HCP or the Plan).

The HCP identifies a number of “covered activities” for the purposes of incidental take authorization by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) (“Wildlife Agencies”). Covered activities include the following:

- Development in designated development areas;
- Allowable development in the HMAs;
- Operations and management activities in HMAs;
- Road corridors and infrastructure construction, operations, and maintenance in HMAs; and
- HCP required action that may result in take.

For the purposes of this analysis, covered activities fall within two primary categories:

1. **Development activities**, which include: development in designated development areas; allowable development in the Habitat Management Areas (HMAs); construction, maintenance, and operation of the identified future road corridor and infrastructure projects.

These activities include all types of development within the designated development areas, including public and private projects and other activities that would result in ground-disturbance. In addition, these activities include all types of development within HMAs, including allowable development and construction, maintenance, and operation of roads and infrastructure projects. Allowable development in the HMAs includes the limited development of approximately 776 acres within the HMAs to support public recreation and open spaces uses or teaching and research activities. The development of the future road corridor and infrastructure projects includes the construction, operation, and maintenance for the Multi-Modal Transportation Corridor (MMTC) and Marina Coast Water District (MCWD) water infrastructure projects. This analysis assumes that development activities would be conducted in accordance with the planning documents associated with each of the land use authorities.



2. **Habitat management activities within HMAs**, which include: operation, maintenance, and improvement activities associated with roads, trails, and fuelbreaks; recreational, research, and educational use; and required habitat management and conservation activities that may result in take in connection with the implementation of the HCP. Habitat management and conservation activities include:
 - Revegetation, restoration, and enhancement;
 - Prescribed burning and alternative vegetative management;
 - Non-native invasive species control;
 - Erosion control for habitat restoration and enhancement; and
 - Monitoring.

The Plan provides for the preservation and management of 18,546 acres of existing vegetation and wildlife habitat on the approximately 28,000-acre former Fort Ord Army base.

The Proposed Action being analyzed is the issuance of Federal and state incidental take permits (ITPs) by the Wildlife Agencies under Section 10(a)(1)(B) of the Federal Endangered Species Act of 1973 (ESA) and under Section 2081 of the California Fish and Game Code in compliance with the California Endangered Species Act of 1984 (CESA). The issuance of the ITPs would authorize take of the state and federally listed species identified in the HCP during the course of the redevelopment of the former Fort Ord military base (the Plan Area) over a 50-year period. The Fort Ord Reuse Authority (FORA) and its member jurisdictions have prepared the Fort Ord HCP as a required component of the application for the Federal ITP.

A. Existing Transportation Conditions and Issues

The Plan Area includes land located on the former Fort Ord Army base; **Exhibit 1** depicts the location of the former base. Roadways that provide direct access to and within the Plan Area include the following:

1. Reservation Road;
2. General Jim Moore Boulevard;
3. Lightfighter Drive;
4. Imjin Parkway;
5. Gigling Road;
6. InterGarrison Road;
7. Parker Flats Road;
8. Second Avenue
9. Imjin Road
10. Eighth Street;
11. Broadway Avenue;
12. South Boundary Road; and
13. Eucalyptus Road.

Other regional roadways that would be traversed to access the former base include:

1. State Route 1 (SR 1);

2. State Route 68 (SR 68);
3. Blanco Road; and
4. Davis Road.

Many of the roadways cited above currently operate at levels of service below the standards of their respective jurisdictions, or are projected to do so within the next 20 years. Those roadways include the following:

Table 1. Existing and Future Levels of Service on Area Roadway System

Location	Levels of Service		Source
	Existing (Year 2008)	Future (Year 2030)	
Segments			
State Route 1			
Imjin to Lightfighter	D	E	1
Lightfighter to Fremont	D	F	1
Fremont to Canyon Del Rey	F	F	2
Canyon Del Rey to Del Monte	F	F	2
Del Monte to N. Fremont	F	F	2
State Route 68			
State Route 1 to Olmstead	F	F	2
Olmstead to Canyon Del Rey	F	F	2
Canyon Del Rey to Bit	F	F	2
Bit to Laureles	F	F	2
Laureles to Corral De Tierra	F	F	2
Corral De Tierra to Portola	F	F	2
Blanco Road			
Reservation to Cooper	F	F	2
Cooper to Davis	F	F	2
Davis Road			
State Route 183 to Blanco	F	F	2
Reservation Road			
Imjin to Blanco	D	F	2
Blanco to Davis	C	F	2
Davis to State Route 68	C	F	2
Intersections			
Imjin Parkway / State Route 1 Ramps	F	F	1
Imjin Parkway / Second Avenue	B	F	1
Imjin Parkway / Abrams Road	C	F	1
Imjin Parkway / Reservation Road	C	F	1
Blanco Road / Reservation Road	B	F	1
General Jim Moore Blvd. / Lightfighter Dr.	C	F	1

Sources:

1. *Monterey-Salinas Transit Operations Center and Whispering Oaks Business Park Traffic Impact Analysis*, Hatch Mott MacDonald, June 18, 2010.
2. *Regional Impact Fee – Nexus Study Update*, Kimley-Horn and Associates, March 26, 2008.



The pedestrian and bicycle networks within the Plan Area are discontinuous. This is due in part to the more rural surroundings of the Plan Area, which currently have low or non-existent demand for pedestrian or bicycle facilities. Roadways in more urbanized areas, such as much of General Jim Moore Boulevard, contain both sidewalks and bicycle lanes. Others, such as InterGarrison Road through the eastern California State University Monterey Bay (CSUMB) campus, provide just vehicle shoulders. The roadway cross sections in more rural areas, such as Eucalyptus Road, remain much as they were when Fort Ord was an Army base – two vehicle travel lanes with no shoulders or pedestrian facilities. Despite the fact that many of these roadways are open for public vehicle traffic, the roadways in these more rural areas currently function more like recreational trails, with little to no vehicle traffic and only recreational pedestrian and bicycle traffic. CSUMB, the Cities of Marina and Seaside, Monterey County, and the Transportation Agency for Monterey County (TAMC) all have adopted individual plans for the completion of a more comprehensive pedestrian and bicycle network throughout the more urbanized areas of the former base. (Note: Although the City of Monterey does have a bicycle plan, it does not include any improvements within the former base.)

Transit service within the Plan Area is provided by Monterey-Salinas Transit (MST). **Exhibit 2** depicts the area transit routes. A total of nine routes traverse the former Army base – Routes 12, 16, 25, 69, 72, 74, 75, 76, and 77. Service is focused upon the developed areas within the Plan Areas, such as CSUMB, the Presidio of Monterey Annex, and The Dunes on Monterey Bay shopping center, as well as the roadways that connect them. Areas with little to no development, such as the area managed by the Bureau of Land Management (BLM), have either no or indirect access to transit; these areas comprise the majority of the property contained within the Plan Area.

There is one airport located within the Plan Area – the Marina Municipal Airport, which is a municipal airport, serving private and recreational aircraft only. Monterey Peninsula Airport, located southwest of the Plan Area, is a full-service commercial airport serving Monterey County, with daily flights to other cities within California and neighboring states.

FORA, the Cities of Marina and Seaside, and Monterey County have all adopted Capital Improvement Programs (CIPs) that incorporate new roadway infrastructure improvements on the former Fort Ord that would accommodate projected future traffic demand and improve overall base circulation. These improvements are funded through local development impact fees (FORA and Marina only), state and federal grants, and other developer funds. Developments on the former Fort Ord are required to pay the FORA traffic impact fee, as well as the Marina fee if located in Marina. (Note: Seaside, Del Rey Oaks, Monterey, and Monterey County do not currently have transportation impact fees that fund roadway infrastructure improvements on the former Fort Ord.) TAMC also administers a regional traffic impact fee across Monterey County that funds roadway improvements across Monterey County, including improvements on the former base; however, development within the former base is not required to pay the TAMC fee.



B. Project Definition

There are a number of uses allowed within the developable areas identified in the Plan. However, development in those areas is administered by the local jurisdictions and FORA.

The development activities described in category 1 above would be required to undergo separate environmental review and permit approval independent of the proposed HCP, relying on the proposed Fort Ord HCP for ESA and CESA compliance. Although the approval of the HCP may streamline future development activities by providing compliance with ESA and CESA, the approval of the HCP does not grant or imply authorization of the development activities. These covered activities would be subject to the approval authority of the individual Permit Applicants in whose jurisdiction the activity or project would occur.

Under the HCP, project proponents would submit applications for incidental take authorization to the local land use authority as part of the standard project review and approval process. The local land use authority would review the application for completeness and for compliance with the terms of the HCP. Take authorization would be issued if the application is complete and compliant with the HCP. As part of the standard approval process, projects would require separate, project-level environmental review under CEQA and, in some cases, NEPA, at a less speculative stage in the land use entitlement process.

Due to the size of the Plan Area and permit duration (50 years), there are limited details available regarding site-specific, future projects, including site plans, location, and timing. At such time when specific development projects are proposed and greater detail is available for review, subsequent CEQA, and potentially NEPA, documents would be required as part of the project review and approval process to identify and mitigate any project-specific impacts. Therefore, traffic impacts caused by development activities are not considered in this EIS/EIR. This traffic analysis focuses on the traffic impacts that would result from permit issuance and implementation of the HCP.

As noted above, development within the Development Areas is governed by the Fort Ord Reuse Plan and the applicable General Plan and Master Plans of the multiple jurisdictions on the former base. Those uses include residential, retail, industrial, and business parks, amongst others. The specific transportation impacts of those developments were previously identified at a programmatic level in the environmental impact reports (EIRs) for the respective Plans that cover the former Fort Ord. Project level environmental analyses (including EIRs) have also assessed the impacts of development constructed from the 1990s through today, and future developments are anticipated to also undergo a similar level of environmental review.



Permit issuance and HCP approval and implementation would authorize the following habitat management activities within HMAs to occur:

1. Operation, maintenance, and improvement activities associated with roads, trails, and fuelbreaks
2. Revegetation, restoration and enhancement - miscellaneous site plantings and other work to restore area to a more natural state;
3. Prescribed burning and alternative vegetation management -
4. Non-native species control, erosion control, monitoring - periodic verification of restoration programs, enforcement of public access rules and regulations, miscellaneous maintenance activities;
5. Recreational, research, and educational use - visits by researchers and classroom groups and public Recreation, consisting of non-motorized, low-impact public recreational and educational activities (hiking, camping, beach recreation, interpretive trails, cycling, running, horseback riding, etc.).

Administration of the activities within each HMA will be conducted by various local, state, federal, and private organizations, including FORA, the California Department of Parks and Recreation, University of California, and the Bureau of Land Management. Implementation of these activities are required to be consistent with the HCP.

C. Thresholds of Significance

For the purposes of this analysis, the proposed Plan would have a significant impact if it causes any of the following results:

- A substantial increase in traffic compared to existing traffic volumes and the capacity of the roadway system;
- A substantial increase in transit demand compared to existing transit demand and the capacity of the existing transit system;
- A substantial increase in air traffic demand or impact the performance of air traffic;
- Safety hazards due to design features or incompatible uses (e.g. hazards to vehicular, pedestrian, and bicycle transit) or inadequate emergency access; or
- Conflict with adopted transportation plans, programs, or projects.

For the purposes of this analysis, potential traffic impacts were qualitatively analyzed based on a review of these activities, location of activities, equipment that may be used, and duration of the activities (short-term, temporary and long-term, permanent) over the next 50 years (to correspond to the permit term of the HCP). Motorized vehicles are not permitted within the HMAs except for authorized personnel.



D. Significance Evaluation

Potential Impact #1 – Traffic Circulation Impacts

Impacts to the regional traffic network have been anticipated through the regional transportation planning efforts described above, including the FORA, Marina, and Seaside, CIPs. Future development activities covered under the HCP will be required to be consistent with these regional planning efforts and addressed in project-level CEQA analysis. Mitigation of traffic impacts as a result of the build-out of former Fort Ord will be implemented by the local land use jurisdictions and funded by development fees.

Potential transportation and circulation impacts as a result of habitat management activities covered under the HCP could occur during habitat restoration and management activities, public recreational use, and operation and maintenance activities.

Implementation of restoration, enhancement, erosion and non-native species control, educational and research activities would be considered short-term and temporary in nature. These activities would occur sporadically over the 50-year permit term and dispersed among and within the HMAs. Because motorized vehicles are not authorized within the HMAs, there would be no traffic impacts within the HMAs. Use of the regional and local roadway network to access the HMAs for these activities would also be sporadic and dispersed throughout the Plan Area without resulting in concentrated traffic disturbances. Therefore, traffic impacts associated with these activities are expected to be less than significant.

The routine operation, management, and maintenance activities associated with the implementation of the HCP are expected to require up to 23 new employees over the 50-year permit term: 8 employees for the Cooperative, 13 for BLM, and 2 for UC. Employee vehicle trips generated by these activities are expected to be similar to the existing traffic volumes associated with the current land management activities, in that they will be sporadic and dispersed throughout the Plan Area without resulting in concentrated traffic disturbances. Therefore, impacts to the regional and local road network would be less than significant.

Long-term traffic impacts may result as a result of public access to HMAs for recreational use. Most of the public recreational use is focused on the BLM, State Parks, Monterey County HMAs. The remaining HMAs will have limited public access, and activities would be restricted to maintenance, research and education; these uses would therefore generate little to no trip activity. BLM, State Parks, and Monterey County all have planning documents that address public access issues, including the identification of existing and proposed parking areas. These areas are currently open to the public and future recreational use is not expected to be significantly greater as future recreational facilities are required to be compatible with the HCP, including the preservation and enhancement of the natural communities and covered species within the HMAs. There is a large portion of the NRMA, approximately 7,400 acres, that is still under Army jurisdiction that is planned to be transferred to BLM in the future. Public access to this area has not been defined at this time, and will be addressed in BLM's Resource Management Plan after the transfer occurs. Therefore, traffic impacts as a result of public access for recreational use would be less than significant.



Potential Impact #2 – Transit Impacts

Permit issuance and approval and implementation of the HCP would result in the addition of 23 new employees over the 50-year permit term. This is not a significant increase in demand on the existing transit system. MST currently serves the former Fort Ord via nine distinct transit routes that connect to the surrounding areas. The public currently uses transit to access the recreational areas on the HMAs and will continue to do so at a similar demand in the future (see discussion above).

Potential Impact #3 – Air Travel Demand and Operational Impacts

The Marina Municipal Airport is located within the Plan Area, and the full-service Monterey Peninsula Airport is located adjacent to the Plan Area. The Plan is not anticipated to significantly increase air traffic demand within the greater Monterey County region, as the covered activities under the HCP would not represent a major regional draw to the area. Also, while portions of the Plan Area are adjacent to or within the flight paths of both airports, the type and height of development that would conflict with air traffic is discouraged, if not prohibited, by the Plan. Therefore, implementation of the Plan would not represent a significant impact upon either air traffic demand or operations.

Potential Impact #4 – Construction Traffic Impacts

The various habitat management activities within the HMAs may result in temporary traffic increases and traffic safety hazards. The temporary traffic increases would be from workers commuting to and from construction-related activities, such as fence repairs and construction of access roadways. Impacts associated with traffic safety hazards and construction-related nuisances could include movement of construction equipment, temporary lane or roadway closures, delays, and detours. The level of activity associated with these construction activities would occur over 50 years and in various locations within the HMAs. Impacts associated with construction would be temporary, and extensive traffic increases would not be likely to occur. However, the traffic safety hazards could impact traffic operations and safety, depending upon the type, location and duration of the construction activity. This is a potentially significant impact.

Mitigation Measure #4 – Construction Traffic Impacts

For any habitat management activity, including restoration and maintenance activities, requiring a grading or encroachment permit from Caltrans, the Cities of Marina, Seaside, Monterey, or Del Rey Oaks, or Monterey County, the jurisdiction or responsible contractor shall follow the standards of that jurisdiction regarding the preparation traffic control plan to address construction-related traffic nuisances and public safety. Each jurisdiction would be responsible for requiring the level of traffic control that it deems appropriate for the situation. If the activity spans multiple jurisdictions, those jurisdictions shall negotiate a mutually acceptable level of traffic control for the construction activity. Implementation of this mitigation would reduce this impact to a less than significant level.



Potential Impact #5 – Potential Conflicts with Transportation Plans, Programs, and Planned Projects

The TAMC 2010 Regional Transportation Plan, the TAMC Regional Development Impact Fee, and the Capital Improvement Programs (CIPs) for FORA and the Cities of Marina and Seaside all contain planned transportation infrastructure projects to be constructed within the Plan Area. In addition, the Cities of Marina and Seaside as well as TAMC and Monterey County have all adopted bicycle master plans for the implementation of new and upgraded bicycle facilities within the Plan Area. CSUMB has identified locations for both pedestrian and bicycle infrastructure improvements within its campus through the adoption of its own campus master plan. The locations of the HMAs within the Plan Area would not obstruct the ability of these agencies to implement their proposed roadway, bicycle, and pedestrian infrastructure improvements; these improvements have been located such that they would specifically not interfere with the proposed boundaries of the HMAs. Therefore, implementation of the Plan would not represent a significant impact upon transportation plans, programs, or planned policies.

E. References

1. *Monterey-Salinas Transit Operations Center and Whispering Oaks Business Park Traffic Impact Analysis*, Hatch Mott MacDonald, June 18, 2010.
2. *Regional Impact Fee – Nexus Study Update*, Kimley-Horn and Associates, March 26, 2008.
3. *Fort Ord Reuse Plan Draft Environmental Impact Report*, EDAW and EMC Planning Group, May 1996.
4. Route maps and schedules, Monterey-Salinas Transit web site (<http://www.mst.org>), accessed February 28, 2012.
5. *City of Marina Bicycle and Pedestrian Master Plan*, City of Marina, Adopted February 2, 2010.
6. *2007 Bicycle Transportation Plan*, City of Seaside, Adopted October 4, 2007.
7. *CSUMB Master Plan*, California State University Monterey Bay, 2007.
8. *TAMC 2005 General Bikeways Plan*, Transportation Agency for Monterey County, Adopted May 25, 2005.
9. *TAMC Bicycle and Pedestrian Master Plan*, Transportation Agency for Monterey County, December 2011.
10. *2008 Monterey County General Bikeways Plan*, Monterey County Department of Public Works, Adopted October 7, 2008.



11. City of Monterey Bicycle Transportation Plan, City of Monterey, Adopted November 17, 2009.
12. *Fort Ord Reuse Authority FY 2011/2012 through 2021/2012 Capital Improvement Program*, Fort Ord Reuse Authority, 2011.
13. *City of Marina 5 Year CIP Project List*, City of Marina, October 13, 2010.
14. *City of Seaside Six Year Capital Improvement Program 2008/09 - 2013/14*, City of Seaside Resource Management Services - Public Works – Engineering, Adpoted June 19, 2008.
15. *County of Monterey Capital Improvement Program Five Year Program 2010-11 through 2014-15*, Monterey County Resource Management Agency, April 2010
16. *2010 Monterey County Regional Transportation Plan*, Transportation Agency for Monterey County, 2010.

F. Conclusion

If you have any questions regarding this letter or need additional information, please do not hesitate to contact Jeff Waller of my office. Thank you for the opportunity to assist you with this project.

Very truly yours,

Hatch Mott MacDonald

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Appendix D
Consultation and Coordination

APPENDIX D. CONSULTATION AND COORDINATION

1) INTRODUCTION

This chapter provides an overview of consultation and other requirements, including a brief overview of applicable Federal Acts and Executive Orders for the Draft HCP.

2) CONSULTATION REQUIREMENTS

2.1) Federal Endangered Species Act

Threatened and endangered species are listed under the provisions of Section 4 of the ESA; Section 9 prohibitions provide for substantial protection of these listed species. Through Section 7 and Section 10 processes, USFWS and NOAA Fisheries ensure that activities undertaken by Federal agencies and non-Federal entities do not result in jeopardy of listed species or adverse modification of critical habitat.

If federally listed species may be affected, the Federal lead agency must informally consult with USFWS and/or NOAA Fisheries to assess the consequences of its actions and to determine whether formal consultation is warranted.

The USFWS is proposing to issue a Section 10 ITP, which is a Federal action that triggers Section 7 consultation requirements. As the Federal action agency for the Draft HCP and permit, the USFWS will consult internally pursuant to Section 7. The USFWS will initiate internal consultation following the submission of the Section 10 permit application package by FORA on behalf of the Permit Applicants.

If USFWS concludes that the action is not likely to adversely affect a listed species, then no formal consultation will be conducted and no biological opinion will be prepared. If the action is likely to result in adverse effects on a listed species, then the USFWS will prepare a biological opinion describing how the action will affect the listed species. The USFWS's opinion will be either a "jeopardy opinion" or a "no-jeopardy opinion." A jeopardy opinion concludes that the proposed action would jeopardize the continued existence of a federally listed species or would adversely modify designated critical habitat. Under this finding, the biological opinion must suggest "reasonable and prudent alternatives" that would avoid jeopardy. If the USFWS issues a no-jeopardy opinion, this opinion may include "reasonable and prudent measures" to minimize adverse effects on listed species and an "incidental take statement" that specifies the allowable amount of take that may occur as a result of the action.

2.2) National Historic Preservation Act

Section 106 of the NHPA requires Federal agencies to inventory historic properties and evaluate the eligibility of those properties for listing in the National Register. The potential effects of the Proposed Action or alternatives on cultural resources, including properties listed or eligible for the National Register, and any necessary measures to avoid or reduce impacts on these resources are described in Section 4.5, *Cultural Resources*.

As presented in that section, implementation of the Draft HCP is not expected to result in any significant effects on cultural resources. Furthermore, a Programmatic Agreement was signed in April 1994 between the Army, the Advisory Council on Historic Preservation, and the State of California Office of Historic Preservation regarding base closure and realignment actions for the former Fort Ord. The agreement constitutes historical resources consultation having occurred at this time, including Native American consultation.

2.3) Farmland Protection Policy Act

The Farmland Protection Policy Act (FPPA) of 1981 requires Federal agencies to consider project alternatives that minimize or avoid adverse impacts on important farmland. As described in Section 3.1.3.6, *Agricultural Resources*, the FPPA does not apply to Federal permitting (7 CFR §658.2[a][1][i]). In addition, the proposed Plan would result in insignificant impacts to important farmland.

The Draft HCP would not adversely affect farmland of any kind as there are no areas of designated farmland in the Plan Area.

2.4) Clean Air Act

Section 176(c) of the CAA requires Federal agencies to ensure that their proposed actions are consistent with the CAA and with federally enforceable SIPs (air quality management plans).

The conformity review process is intended to ensure that Federal agency actions will not cause or contribute to new violations of any Federal ambient air quality standards; will not increase the frequency or severity of any existing violations of Federal ambient air quality standards; and will not delay the timely attainment of Federal ambient air quality standards.

As discussed in Section 4.2, *Air Quality*, implementation of the Draft HCP is not anticipated to result in any significant construction-related or operational air quality effects, as all effects would be temporary in nature and addressed through Draft HCP measures, standard construction BMPs, as well as other requirements related to minimizing land disturbance.

Future prescribed burns conducted in connection with the Proposed Action would be required to comply with all applicable requirements of MBARD's Smoke Management Program. Compliance with MBARD's requirements would ensure that temporary increases in air quality emissions would be below acceptable levels. Moreover, the implementation of applicable HCP Measures (e.g., AMMs and MMs) would further ensure that potential impacts are minimized. Applicable HCP Measures include conducting prescribed burns on a rotational basis and in advance of new development, using alternative management techniques in lieu of prescribed burns, and researching other vegetation management techniques. In addition, additional mitigation measures have been identified to further ensure that temporary air quality effects are minimized to a less-than-significant level.

2.5) Migratory Bird Treaty Act

Migratory birds are protected by the USFWS under the provisions of the MBTA of 1916 as amended (16 U.S.C. Chapter 7, 703-712) which governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. The take of all migratory birds is governed by the MBTA's regulation of taking migratory birds for educational, scientific, and recreational purposes and requiring harvest to be limited to levels that prevent over utilization. Section 704 of the MBTA states that the Secretary of the Interior (Secretary) is authorized and directed to determine if, and by what means, the take of migratory birds should be allowed and to adopt suitable regulations permitting and governing take. The Secretary in adopting regulations is to consider such factors as distribution and abundance to ensure that take is compatible with the protection of the species.

EO 13186 (signed January 10, 2001) directs each Federal agency taking actions that would have or would likely have a negative impact on migratory bird populations to work with the USFWS to develop a MOU to promote the conservation of migratory bird populations. Protocols developed under the MOU must include the following agency responsibilities:

- Avoid and minimize, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions.
- Restore and enhance habitat of migratory birds, as practicable.
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

EO 13186 is designed to assist Federal agencies in their efforts to comply with the MBTA; it does not constitute any legal authorization to take migratory birds. Take, under the MBTA, is defined as the action of, or an attempt to, pursue, hunt, shoot, capture, collect, or kill (Title 50, CFR, Section 10.12). The definition includes “intentional” take (take that is the purpose of the activity in question) and “unintentional” take (take that results from, but is not the purpose of, the activity in question). This guidance would be utilized in informal consultation on any such activities within the Plan Area.

3) EXECUTIVE ORDERS

3.1) Executive Order 11988 – Floodplain Management

EO 11988, Floodplain Management, requires Federal agencies to prepare floodplain assessments for proposed projects located in or affecting floodplains. An agency proposing to conduct an action in a floodplain must consider alternatives to avoid adverse effects and incompatible development in the floodplain. If the only practicable alternative involves siting in a floodplain, the agency must minimize potential harm to or development in the floodplain and explain why the action is proposed in the floodplain.

The Draft HCP would not directly result in any incompatible development within a floodplain (please see Section 4.7, *Hydrology and Water Quality*, for further discussion).

3.2) Executive Order 11990 – Protection of Wetlands

EO 11990, Protection of Wetlands, requires Federal agencies to prepare wetland assessments for projects located in or affecting wetlands. Agencies must avoid undertaking new construction in wetlands unless no practicable alternative is available and the proposed action includes all practicable measures to minimize harm to wetlands.

The Draft HCP has been designed to address impacts on Federal and State jurisdictional waters, including wetlands. Specific biological goals and objectives for wetlands have been developed and the Draft HCP conservation strategy includes a range of specific measures to avoid and mitigate for impacts to these resources. Specific measures outlined in the Draft HCP include, but are not limited to:

- **AMM-20.** Site allowable development in HMAs to avoid or reduce impacts on HCP species and natural communities, including:
 - Site allowable development to avoid occupied or potential sand gilia habitat, wetlands, and known or potential breeding habitat for California tiger salamander in the FONM. Development siting will not compromise BLM’s ability to successfully manage the FONM.
- **AMM-35.** Install silt fences or other sediment control devices where there is potential for sediment to move offsite and degrade natural communities, particularly vernal pools, ponds, creeks, or seasonal wetlands.

- **AMM-43.** Develop and implement fire and alternative vegetative management plan that describes best management practices and avoidance measures, including:
 - When using fire retardants and foams, maintain a buffer of 300 feet from vernal pools or ponds to prevent equipment from entering wetlands and to reduce the likelihood that prescribed burn activities will contaminate wetlands.
- **AMM-50.** Disinfect equipment according to the Declining Amphibian Population Task Force's Code of Practice to avoid transferring disease or pathogens between aquatic habitats. All individuals conducting aquatic monitoring or entering wetlands during management, research, or educational programs will ensure that their equipment has been properly disinfected. Care will be taken so that all traces of disinfectant are removed from all equipment before use in a new aquatic habitat.

These measures would provide adequate protection for existing wetlands in the Plan Area.

3.3) Executive Order 12898 – Environmental Justice

EO 12898, Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, requires Federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their actions on minorities and low-income populations and communities.

Potential impacts related to environmental justice are discussed in Section 4.12, *Socioeconomics and Environmental Justice*.

Appendix E
List of Preparers

APPENDIX E. LIST OF PREPARERS

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Appendix F

Acronyms, Abbreviations, and Glossary

APPENDIX F. ACRONYMS, ABBREVIATIONS, AND GLOSSARY

1) ACRONYMS AND ABBREVIATIONS

2016 AQMP	<i>2012-2015 Air Quality Management Plan</i> (MBARD, 2016)
AAQS.....	Ambient Air Quality Standards
AB 1493	California Assembly Bill 1493
AB 32.....	California Assembly Bill 32 (California Global Warming Solutions Act of 2006)
ACEC.....	Area of Critical Environmental Concern
ACM	Asbestos Containing Material
ADA.....	Americans with Disabilities Act
AFY	Acre-Feet per Year
AMBAG.....	Association of Monterey Bay Area Governments
AMMs.....	Draft Fort Ord HCP Avoidance and Minimization Measures
Annual Report.....	<i>Draft Water Year 2015 Seawater Intrusion Analysis Report of Seaside Basin, County of Monterey California</i> (Hydrometrics WRI, 2015)
APS	Alternative Planning Strategy
AQMP	Air Quality Management Plan
Army	U.S. Department of the Army
Army's FEIS and FSEIS	<i>Fort Ord Disposal and Reuse Final Environmental Impact Statement</i> (USACE, 1993), and the <i>Fort Ord Disposal and Reuse Final Supplemental Environmental Impact Statement</i> (USACE, 1997)
Army's HMP.....	<i>Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord</i> (USACE 1997)
ASV	All Seasons Vehicle
BA.....	Biological Assessment
Baseline studies.....	<i>Flora and Fauna Baseline Study of Fort Ord, California</i> (USACE, 1992)
Basin Plan	Water Quality Control Plan for the Central Coastal Basin
BLM.....	Bureau of Land Management
BO.....	Biological Opinion
BOT/CSUMB	Board of Trustees of California State University (on behalf of the Monterey Bay campus)
BMPs	Best Management Practices
BRA	Baseline Risk Assessment
Btu.....	British thermal unit
CAA.....	Clean Air Act
CAAQS.....	California Ambient Air Quality Standards
Cal-Am.....	California-American Water Company
Cal-EPA	California Environmental Protection Agency
Cal-OSHA.....	California State Division of Occupational Safety and Health
CalRecycle.....	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB.....	California Air Resources Board
CAT	Climate Action Team
CAPCOA	California Air Pollution Control Officers Association
CBC	California Building Codes
CBSC	California Building Standards Commission
CCA	California Coastal Act
CCC	California Coastal Commission

CCLEAN	Central Coast Long-term Environmental Assessment Network
CCoWS	Central Coast Watershed Studies
CCR	California Code of Regulations
CDFG.....	California Department of Fish and Game
CDFW.....	California Department of Fish and Wildlife (formerly California Department of Fish and Game [CDFG])
CDP.....	Coastal Development Permit
CEDD.....	California Employment Development Department
CEC.....	California Energy Commission
CEQ.....	Council on Environmental Quality
CEQA.....	California Environmental Quality Act
CERCLA.....	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CFCs	Chlorofluorocarbons
CFD.....	Community Facilities District
CFG Code	California Fish and Game Code
CFG Commission.....	California Fish and Game Commission
CFR.....	Code of Federal Regulation
CH ₄	Methane
CIP	Capital Improvement Program
CIWMB	California Integrated Waste Management Board
CNDDB	California Natural Diversity Database
CNEL.....	Community Noise Equivalent Level
CNPPA.....	California Native Plant Protection Act
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CNRA	California Natural Resource Agency
CO.....	Carbon monoxide
CO ₂	Carbon dioxide
CO ₂ e.....	Carbon dioxide equivalents
Cooperative.....	Fort Ord Regional Habitat Cooperative
CPUC	California Public Utilities Commission
CRMP	Coordinated Resource Management Planning
CRHR.....	California Register of Historic Resources
CRPR	California Rare Plant Rank
CSUMB	California State University, Monterey Bay
CTR.....	California Toxics Rule
CWA	Clean Water Act
CZMA.....	Coastal Zone Management Act of 1972
dB.....	decibel
dBA.....	A-weighted sound level
DD&A.....	Denise Duffy & Associates, Inc.
DDT	Dichloro-Diphenyl-Trichloroethan
DENR.....	Presidio of Monterey, Directorate of Environmental and Natural Resource Management
DMM	Discarded Military Munitions
DOT	U.S. Department of Transportation
Draft Fort Ord HCP	Draft Fort Ord Multispecies Habitat Conservation Plan
DSEIS	Draft Supplemental Environmental Impact Study
DTSC	Department of Toxic Substance Control Division

EA	Environmental Assessment
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report (CEQA)
EIS	Environmental Impact Statement (NEPA)
EMC	EMC Planning Group Inc.
EO	Executive Order
ERA	Ecological Risk Assessment
ESA	Federal Endangered Species Act
ESCA	Environmental Services Cooperative Agreement
ESHA	Environmentally Sensitive Habitat Areas
ESNERR	Elkhorn Slough National Estuarine Research Reserve
FAR	Floor Area Ratio
FDA	Fritzsche Army Airfield Fire Drill Area
FE	listed as endangered under FESA
FEME	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
FLPMA	Federal Land Policy and Management Act
FMP	Forest Management Plan
FODSP	Fort Ord Dunes State Park
FOMP	Fort Ord Master Plan
FONM	Fort Ord National Monument
FONR	Fort Ord Natural Reserve
FORA	Fort Ord Reuse Authority
FORIS	Fort Ord Reuse Infrastructure Study
FORTAG	Fort Ord Recreational Trail and Greenway
FOSET	Findings of Suitability of Early Transfer
FOST	Findings of Suitability to Transfer
FPPA	Farmland Protection Policy Act
FS	Feasibility Study
FT	listed as threatened under FESA
FTE	Full-time Equivalent
GHGs	Greenhouse Gases
GHGRP	Greenhouse Gas Reporting Program
GIS	Geographic Information Systems
GMPAP	Greater Monterey Peninsula Area Plan
GSAs	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plan
GWh	gigawatt hours
HAPs	Hazardous Air Pollutants
HCP	Habitat Conservation Plan
HFCs	Hydroflorocarbons
Highway 1	State Route 1
Highway 68	State Route 68
HLA	Harding Lawson Associates
HMAAs	Habitat Management Areas
HMP	<i>Installation-Wide Multispecies Habitat Management Plan for the Former Fort Ord (USACE, 1997)</i>
hp	horsepower
Hz	Hertz
IA	Implementing Agreement
IPCC	Intergovernmental Panel on Climate Change

ISAC	Invasive Species Advisory Committee
ITP	Incidental Take Permit
IWG	Interagency Working Group on Environmental Justice
J&S.....	Jones & Stokes Associates
JPA.....	Joint Powers Authority
km	kilometers
kW.....	kilowatt
kWh.....	kilowatt hour
LAFCO	Local Agency Formation Commission
lbs.....	pounds
lbs/acre-day	pounds per acre per day
lb/day	pounds per day
LCFS.....	Low Carbon Fuel Standards
LCP	Local Coastal Program
L _{dn}	Day-Night Noise Level Scale
L _{eq}	average equivalent sound level
LOS.....	Level of Service
LOT.....	Letter of Transfer
LTS	Less than significant
LTSWM	Less than significant with mitigation
M1W	Monterey One Water
MACTEC	MACTECT Engineering and Consulting, Inc.
Marina Airport CLUP	<i>Marina Municipal Airport Comprehensive Land Use Plan</i> (Monterey County Airport Land Use Commission, 1996)
MBCP	Monterey Bay Community Power
MBNMS.....	Monterey Bay National Marine Sanctuary
MBSST	Monterey Bay Sanctuary Scenic Trail
MBTA	Migratory Bird Treaty Act
MBARD.....	Monterey Bay Air Resources District (previously Monterey Bay Unified Air Pollution Control District or MBUAPCD)
MCWD.....	Marina Coast Water District
MCWRA	Monterey County Water Resources Agency
MEC.....	Munitions and Explosives of Concern
MGD	million gallons per day
mg/L.....	milligrams per liter
µg/L.....	micrograms per liter
µg/m ³	micrograms per cubic meter
MMs.....	Draft Fort Ord HCP Mitigation Measures
MMTC	Multi-Modal Transportation Corridor
MNA	Monitored Natural Attenuation
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPC.....	Monterey Peninsula College
mpg	miles per gallon
MPOs	Metropolitan Planning Organizations
MPPRD	Monterey Peninsula Regional Park District
MPWMD	Monterey Peninsula Water Management District
MR	Munitions Response
MRSWMP	Monterey Regional Stormwater Management Program
MS4.....	Municipal Separate Storm Sewer Systems
MST	Monterey-Salinas Transit

MT	Metric Tons
MURP	Model Urban Runoff Program
NA.....	Not available
NAE	Natural Area Expansion
N ₂ O	Nitrous oxide
NAAQS.....	National Ambient Air Quality Standards
National Register	National Register of Historic Places
NCA.....	National Conservation Area
NCCAB.....	North Central Coast Air Basin
NCCP.....	Natural Community Conservation Plan
NCCPA	Natural Community Conservation Planning Act
NEPA	National Environmental Policy Act
NESHAPS.....	National Emission Standards for Hazardous Air Pollutants
NF ₃	Nitrogen Trifluoride
NFIP.....	National Flood Insurance Program
NHPA.....	National Historic Preservation Act
NLCS	National Landscape Conservation System
NOAA Fisheries.....	National Oceanic and Atmospheric Administration National Marine Fisheries Service
NOA.....	Notice of Availability
NOC	Notice of Completion
NOI	Notice of Intent (NEPA)
NOP	Notice of Preparation (CEQA)
NO _x	Nitrogen oxides
NO ₂	Nitrogen dioxide
NPDES.....	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP.....	National Register of Historic Places
NRZ	Natural Resource Zone
NTAC.....	Nitrate Technical Advisory Committee
O ₃	Ozone
O&M.....	Operation and Management
Ocean Plan	<i>Water Quality Control Plan for Ocean Waters of California</i> (SWRCB, 2015)
OE	Ordnance and Explosives
OEHHA	Office of Environmental Health Hazard Assessment
OPLMA	Omnibus Public Land Management Act of 2009
OPR.....	California Office of Planning and Research
OSHA.....	Occupational Safety and Health Administration
OU1.....	Operable Unit 1
OU2.....	Operable Unit 2
OU-CTP	Operable Unit Carbon Tetrachloride Plume
PAHs.....	Polynuclear Aromatic Hydrocarbons
PBMP.....	Prescribed Burn Management Program
PCBs	Polychlorinated Biphenyls
PFCs.....	Perfluorocarbons
PG&E.....	Pacific Gas and Electric Company
PM ₁₀	Respirable Particulate Matter (Particulate matter less than 10 microns in diameter)
PM _{2.5}	Fine Particulate Matter (Particulate matter less than 2.5 microns in diameter)

POM.....	Presidio of Monterey
ppm	parts per million
ppmw	parts per million by weight
PSE.....	Participating Special Entities
RATRI	Road and Trail Resources Inventory
R&D.....	Research and Development
RCRA.....	Resource Conservation Recovery Act
Reuse Plan.....	<i>Fort Ord Reuse Plan</i> (EMC and EDAW, 1997)
RI	Remedial Investigation
RI/FS.....	Remedial Investigation/Feasibility Study
RMP	<i>Southern Diablo Mountain Range and Central Coast of California Resource Management Plan</i> (U.S. Department of the Interior-BLM, 2007)
ROD.....	Record of Decision
ROW	Right-of-way
RPS Program.....	Renewables Portfolio Standard Program
RTP	Regional Transportation Plan
RV	Recreational Vehicle
RWD	Reports of Waste Discharge
RWQCB.....	Regional Water Quality Control Board
RWQCB-CCR.....	California Regional Water Quality Control Board Central Coast Region
SCRAMP	Sports Car Racing Association of Monterey Peninsula
SCS	Sustainable Communities Strategy
SB 1368.....	California State Senate Bill 1368
SB 97.....	California State Senate Bill 97
SCSD	Seaside County Sanitation District
SE.....	listed as endangered under CESA
SEA.....	Monterey Regional Stormwater & Education Alliance
Secretary	Secretary of the Interior
SF ₆	Sulfur hexafluoride
SGB.....	Seaside Groundwater Basin
SGMA	Sustainable Groundwater Management Act of 2014
SHPO	California State Historic Preservation Officer
SIPs	State Implementation Plans
SO ₂	Sulfur dioxide
SO _x	Sulfur oxides
SOI.....	Sphere of Influence
SR 1.....	State Route 1
SR 68.....	State Route 68
SRFD	Salinas Rural Fire District
SSC	California Species of Special Concern
ST.....	listed as threatened under CESA
State Parks.....	California Department of Parks and Recreation
SVGB.....	Salinas Valley Groundwater Basin
SWPPP.....	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TAMC.....	Transportation Agency for Monterey County
TCE.....	Trichloroethylene
Technical Support Document.....	<i>Air Toxics Hot Spots Program Technical Support Document for the Derivation of Non-Cancer Reference Exposure Levels</i> (OEHHA, 2008)

TMDL	Total Maximum Daily Load
UC	Regents of the University of California
UC FONR	University of California Fort Ord Natural Reserve
UC/NRS	University of California Natural Reserve System
UCSC	University of California, Santa Cruz
USA North	Underground Service Alert North
U.S. EPA	U.S. Environmental Protection Agency
USACE	U.S. Army Corps of Engineers
USFWS	United States Fish & Wildlife Service
USGS	U.S. Geological Survey
UXO	Unexploded Ordnance
VOCs	Volatile Organic Compounds
WDRs.....	Waste Discharge Requirements

2) GLOSSARY

Adaptive Management. A method for examining alternative strategies for meeting measurable biological goals and objectives, and then if necessary, adjusting future conservation management actions according to what is learned.

Affected Environment. Existing biological, physical, social, and economic conditions of an area subject to change, both directly and indirectly, as a result of a proposed human action.

Allowable Development. Allowable development is a category of covered activities that specifies the acreage of disturbance allowed in each of the HMAs. The allowable development acreage ranges from 0 to 292 acres, and totals 776 acres for all HMAs.

AMMs. Avoidance and minimization measures of the Draft HCP.

Best Management Practice. Any program, technology, process, siting criterion, operating method, measure, or device that controls, prevents, removes, or reduces pollution.

Biological Assessment. To facilitate compliance with section 7(a)(2), Federal agencies must prepare a BA, pursuant to section 7(c)(1) that identifies the likely effects of the Federal action on threatened and endangered species.

Biological Opinion. The document stating the opinion of the USFWS and/or the NOAA Fisheries as to whether or not a federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. A biological opinion is one of the decision documents of a consultation under Section 7 of the Federal Endangered Species Act.

Borderlands. Borderlands are designated development parcels or HMA parcels at the urban/wildland interface where specific planning and design considerations and management activities are required to minimize effects of development on HCP species and natural communities.

City Limits. The official jurisdictional boundary of a city.

Conservation Measure. A management action that, when implemented, will partially or wholly achieve Draft HCP objectives for covered species, vegetation communities, biodiversity, or ecosystem function.

Conservation Strategy. The overall unified approach for achieving biological goals and objectives, expressed as the collection of all conservation activities in the Draft HCP.

Cooperative. The Fort Ord Regional Habitat Cooperative (Cooperative), a Joint Powers Authority (JPA), will arrange for (and fund through an endowment) coordinated management of habitat reserve lands transferred to Monterey County, City of Marina, MPRPD, and MPC.

Covered Activities. The categories of activities proposed for incidental take coverage in the Draft HCP.

Covered Species. The species for which incidental take coverage would be provided under the Draft HCP.

Critical Habitat. An area designated by the USFWS or by the National Marine Fisheries Service pursuant to the Federal Endangered Species Act. Critical habitat areas are specific geographic areas that

may or may not be occupied by listed species, that have been determined to be essential for the conservation and management of listed species, and that have been formally described and designated in the Federal Register.

Cultural Resources. Building, site, district, structure, or object significant in history, architecture, archeology, culture, or science.

dB decibel. A unit for measuring relative amplitude of sound.

Designated Development Area. This land use category includes all of the parcels that the HMP designates as “development” and encompasses 9,292 acres. These areas include both currently developed lands (i.e., lands with existing structures), as well as natural lands.

Development in Designated Development Areas. Development in designated development areas would be required to maintain compliance with the Stay-Ahead Provision (please refer to Section 7.6, *Stay Ahead Provision*, of the Draft HCP). Depending on the location, development in these areas would have to include HCP required avoidance and minimization measures as identified in Chapter 5, *Conservation Strategy*, of the Draft HCP.

East Garrison Reserve. The East Garrison Reserve is in the northeastern portion of the Plan Area and consists of two separate areas, north and south of InterGarrison Road. The East Garrison North Reserve (parcel E11a) is 147 acres and borders the south side of Reservation Road.

Ecosystem. A community of organisms and their physical environment interacting as an ecological unit.

Effect. The environmental consequence of an activity or project. Same as “impact.”

Federal Endangered Species Act. The Federal Endangered Species Act (ESA) of 1973 (16 U.S.C. 26 1531-1544), as amended, under section 9, provides for the prohibition of “take” of any fish or wildlife species listed as threatened or endangered under the ESA unless specifically authorized by regulation.

Fort Ord Dunes State Park. FODSP totals 979 acres and about four miles of ocean beach in an unincorporated portion of Monterey County west of SR 1.

Fort Ord Natural Reserve. As outlined in the 1997 HMP and amended in 1999, the UC will manage three habitat reserve parcels and one “development with reserves” parcel. These four parcels (606 acres) are located in and adjacent to the city of Marina, in the County of Monterey.

Geographic Information System (GIS). Computer-based mapping technology that manipulates geographic data in digital layers and enables one to conduct a wide array of environmental analyses.

Habitat. The environmental conditions that support occupancy of a given organism in a specified area.

Habitat Conservation Plan. Per section 10(a)(2)(A) of the ESA, a Habitat Conservation Plan (HCP) is a planning document that is a mandatory component of an incidental take permit application. An HCP specifies, among other things, the impacts that are likely to result from the taking and the measures the permit applicant will undertake to minimize and mitigate such impacts.

Habitat Corridor/Travel Camp. The Habitat Corridor/Travel Camp HMA comprises 398 acres just west of the former East Garrison.

Habitat Creation. The establishment of a vegetation community in an area that did not previously support it.

Habitat Enhancement. The improvement of an existing degraded vegetation community. Enhancement involves improving one or more ecological factors, such as species richness, species diversity, overall vegetative cover, or wildlife value. Enhancement activities typically occur on substrates that are largely intact.

Habitat Restoration. Restoration is the establishment of a vegetation community in an area that historically supported it, but no longer supports it because of the loss of one or more required ecological factors. Restoration may involve altering the substrate to improve a site's ability to support the historic vegetation community.

Harass. An intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.

Harm. An act that actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

HMAs. Land designated as Habitat Management Areas (HMAs) in the Draft Fort Ord HCP include groups of HMP parcels that were designated habitat reserves, habitat corridors, and development with reserves or restrictions in the HMP and total 18,546 acres.

Hydrology. The movement of surface and subsurface water flows in a given area. The hydrology of an area is intimately connected with its precipitation, soils, and topography.

Important Farmland. As defined by the U.S. Department of Agriculture, Natural Resources Conservation Service (formerly the Soil Conservation Service), Important Farmlands include Prime Farmland, Unique Farmland, Farmland of Statewide Importance, and Farmland of Local Importance. The categorization of farmland is based upon a soil classification system, which accounts for the physical and chemical characteristics of the land and the suitability of the land for producing crops. Important Farmlands are afforded special protection due to their importance to agricultural production.

Impact. The environmental consequence of an activity or project. Same as "effect."

Implementing Entity. An organization that will be responsible for fully implementing the Draft HCP the Proposed Action or its alternatives.

Incidental Take. Any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.

Laguna Seca Recreation Expansion. The Laguna Seca Recreation Expansion is comprised of two separate parcels located along the southern boundary of the Plan Area adjacent to the Laguna Seca Raceway.

Land Cover. The dominant feature of the land surface, used to define changes in habitat conditions under the Proposed Action and its alternatives.

Landfill Parcel. This 308-acre parcel is generally northeast of the main CSUMB campus, south of Imjin Parkway and north of Inter-Garrison Road.

Lead Agency. A lead agency is an agency initiating and overseeing the preparation of an environmental impact report or environmental impact statement.

Listed Species. A species that has been designated as “endangered” or “threatened” pursuant to the Federal Endangered Species Act or California Endangered Species Act.

Marina Airport Habitat Reserve. The Marina Airport Habitat Reserve is a 130-acre area that occurs at the westerly end of the main Marina Municipal Airport runway.

Marina Northwest Corner. This 63-acre parcel borders SR 1 and existing residential areas in the City of Marina at the northwestern corner of the Plan Area.

Mitigation. Actions or project design features that reduce environmental impacts by avoiding, minimizing, or compensating for adverse effects.

MMs. Mitigation measures of the Draft HCP.

National Register of Historic Places. The nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the National Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

Natural Area Expansion. The Monterey Peninsula Regional Parks NAE would be an expansion of the existing Frog Pond Natural Area (owned by MPRPD). The Frog Pond Natural Area is just outside the boundary of the Plan Area on adjacent land in the city of Del Rey Oaks.

Natural Lands. Natural lands are land that would be developed during the HCP permit term and have interim land management responsibilities.

Natural Resource Management Area. There are 14,645 acres within the Plan Area identified as the NRMA, which comprises the largest habitat reserve on the former base, supporting a diversity of plant communities and wide range of habitat types important to the preservation of HCP species.

No-take Species. Species for which take is not authorized under the Draft HCP.

Oak Oval Reserve. The Oak Oval Reserve is 73 acres of oak woodland habitat adjacent to designated development areas.

Parker Flats Reserve. The Parker Flats Reserve consists of 379 acres between the NRMA and the designated development areas.

Permit Area. The area for which incidental take coverage can be authorized for Covered Activities in accordance with the Draft HCP.

Plan Area. The former Army facility known as Fort Ord. The Plan Area occupies 27,838 acres (approximately 45 square miles) of land along the Pacific Ocean, approximately 100 miles south of San Francisco, California.

PM₁₀. Particulate matter less than 10 microns in mean diameter.

Permit Applicants. Those entities requesting a Section 10(a)(1)(B) incidental take permit from USFWS and a take permit from CDFW for the species and activities covered in the Draft HCP.

Preconstruction Surveys. Surveys conducted for certain biological resources immediately prior to construction to ensure that species and habitat avoidance and minimization measures can be effectively implemented during construction of covered projects or implementation of covered activities.

Range 45 Reserve. This reserve is located in the Parker Flats area and consists of two parcels totaling about 206 acres bordering Range 45, which are designated for future development by MPC

Recovery. Restoration of listed species to a point at which the protections of the Federal Endangered Species Act are no longer required.

Riparian Habitat. Vegetation associated with river, stream, or lake banks and floodplains.

Ruderal Lands. Highly disturbed lands.

Salinas River Habitat Area. The 43-acre Salinas River Habitat Area is located on the east central edge of the Marina Municipal Airport.

Special-Status Species. Plants and animals that are legally protected under the Federal Endangered Species Act and California Endangered Species Act (i.e., listed species) or under other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing.

Suitable Habitat. Habitat that exhibits the characteristics necessary to support a given species.

Study Area. The geographic area considered in the Draft HCP and Draft EIS/EIR.

Take (Federal Endangered Species Act). To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

Take (California Endangered Species Act). To hunt, pursue, catch, capture, or kill, or to attempt to hunt, pursue, catch, capture, or kill.

Threatened species. A species or subspecies that is likely to become endangered in the foreseeable future.

Waters of the U.S. Per the Clean Water Act, “Waters of the U.S.” include: (1) all waters that may be susceptible to use in interstate or foreign commerce and (2) all interstate waters.

Wildlife Agencies. The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife.

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Appendix G

References

APPENDIX G. REFERENCES

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