

Cordova Hills Final Environmental Impact Statement



Prepared for:



**US Army Corps
of Engineers**®
Sacramento District

NEPA Cooperating Agencies:



U.S. Environmental
Protection Agency



County of
Sacramento



Sacramento Metropolitan
Air Quality Management District

Prepared by:

AECOM

March 2016

Cordova Hills Final Environmental Impact Statement



Prepared for:



**US Army Corps
of Engineers**®
Sacramento District

U.S. Army Corps of Engineers, Sacramento District
1325 J Street, Room 1350
Sacramento, California 95814

Contact:

Lisa Gibson
Senior Project Manager
916/557-5250

Prepared by:

AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

Contact:

Matthew Gerken
Project Manager
916/414-5800

AECOM

March 2016

TABLE OF CONTENTS

Section	Page
ACRONYMS AND OTHER ABBREVIATIONS	iii
1 INTRODUCTION	1-1
1.1 Purpose and Intended Uses of the Final Environmental Impact Statement.....	1-1
1.2 Project Requiring Environmental Analysis	1-1
1.3 Project Purpose and Need.....	1-2
1.4 Agency Roles and Responsibilities	1-4
1.5 Summary Description of the Project Alternatives.....	1-5
1.6 Requirements for Responding to Comments.....	1-7
1.7 Requirements for Document Certification and Future Steps in Project Approval	1-8
1.8 Organization and Format of the Final Environmental Impact Statement.....	1-8
2 MODIFIED PROPOSED ACTION.....	2-1
2.1 Process Overview	2-1
2.2 Description of the Modified Proposed Action Alternative.....	2-1
2.3 Wetland Effects of the Proposed Action	2-2
2.4 Comparison to the Proposed Action and Alternatives.....	2-2
2.5 Residual Significance of Aquatic Resource Effects	2-10
3 COMMENTS AND RESPONSES	3-1
3.1 Introduction	3-1
3.2 List of Commenters on the DEIS	3-1
3.3 Format of Comments and Responses	3-1
3.4 Comments and Responses on the DEIS	3-2
4 ERRATA.....	4-1
4.1 Introduction	4-1
4.2 Revisions to the DEIS	4-1
5 LIST OF PREPARERS.....	6-1
5.1 U.S. Army Corps of Engineers, Sacramento District (Lead Agency).....	6-1
5.2 AECOM (EIS Preparers).....	6-1
 Appendix	
A	Cordova Hills Final Mitigation Proposal
B	North Loop Road Relocation Memo

TABLE OF CONTENTS

continued

Page

FEIS Exhibits

Exhibit 2-1. Areas of Wetland and Water Avoidance and Effects - Modified Proposed Action.....	2-3
Exhibit 2-2. Modified Proposed Action Land Use Plan	2-5

FEIS Tables

Table 2-1 Summary of Land Use Designations and Sacramento County Permitted Uses – Modified Proposed Action and DEIS Proposed Action	2-7
Table 2-2 Summary of Estimated Wetland Effects by Alternative	2-8
Table 2-3 Acreage and Type of Waters Estimated to be Directly Affected – Modified Proposed Action	2-8
Table 3-1 Comment Letters Regarding the DEIS	3-1

Revised DEIS Tables

Table 2-8 Sacramento County Certified EIR Mitigation Measures, Development Agreement Obligations, and Conditions of Approval	4-1
Table 3.0-2 Related Residential/Commercial Actions in Eastern Sacramento County and the City of Rancho Cordova	4-5
Table 3.3-3 Summary of Annual Ambient Air Quality Data (2010–2012)a.....	4-7
Table 3.4-4 Summary of Direct Off-Site Wetland Effects from Proposed Roadways.....	4-9

ACRONYMS AND OTHER ABBREVIATIONS

AQMP	air quality management plan
BMP	Best Management Practice
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CNPS	California Native Plant Society
CO	carbon monoxide
County	Sacramento County
CWA	Clean Water Act
DA	Department of the Army
DEIS	Draft EIS
du/ac	dwelling units per acre
EPA	U.S. Environmental Protection Agency
ESA	Federal Endangered Species Act
FEIS	Final Environmental Impact Statement
GHG	greenhouse gas emissions
JPA	Joint Powers Authority
LEDPA	least environmentally damaging practicable alternative
MMP	mitigation monitoring plan
MTP/SCS	Metropolitan Transportation Plan/Sustainable Communities Plan
NEPA	National Environmental Policy Act
NOA	Notice of Availability
NOI	notice of intent
NOP	notice of preparation
PM _{2.5}	particulate matter
ROD	Record of Decision
RWQCB	Central Valley Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SB	Senate Bill
SMAQMD	Sacramento Metropolitan Air Quality Management District
SSHCP	South Sacramento County Habitat Conservation Plan
U.S. 50	U.S. Highway 50
USACE	U.S. Army Corps of Engineers
USB	Urban Services Boundary

ACRONYMS AND OTHER ABBREVIATIONS

USDI	U.S. Department of the Interior
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compounds

1 INTRODUCTION

This Final Environmental Impact Statement (FEIS) has been prepared to respond to comments received on the Draft EIS (DEIS) for the Cordova Hills Project. The FEIS has been prepared by the U.S. Army Corps of Engineers (USACE), Sacramento District in accordance with the requirements of the National Environmental Policy Act (NEPA). USACE is the lead agency under NEPA. The U.S. Environmental Protection Agency (EPA), Sacramento County, and the Sacramento Metropolitan Air Quality Management District (SMAQMD) are cooperating agencies under NEPA.

On November 28, 2014, USACE released the DEIS for public review and comment. The comment period was extended in response to a request by EPA, and closed on January 29, 2015. The DEIS evaluated the potential environmental effects of the Proposed Project (Proposed Project Alternative) and four land use alternatives. A meeting to receive public input on the DEIS was held at Rancho Cordova City Hall on December 17, 2014; there were no attendees at the public meeting. Written comments were received from Federal, State, regional, and local agencies, as well as from organizations and individuals. USACE considered the comments received on the DEIS, and have provided responses thereto in this FEIS.

The FEIS consists of the entire DEIS and the comments, responses to comments, and revisions to the DEIS.

1.1 PURPOSE AND INTENDED USES OF THE FINAL ENVIRONMENTAL IMPACT STATEMENT

NEPA requires a lead agency that has completed a DEIS to consult with and obtain comments from public agencies (cooperating, responsible, and/or trustee agencies) that have legal jurisdiction with respect to the Proposed Action, and to provide the general public with opportunities to comment on the DEIS. The FEIS is a mechanism for responding to these comments. This FEIS has been prepared to respond to comments received from agencies, organizations, and members of the public on the DEIS for the Cordova Hills Project, which are reproduced in this document; and to present corrections, revisions, and other clarifications and amplifications to the DEIS made in response to these comments. The DEIS and this FEIS will be used to support USACE's Record of Decision (ROD) documenting the conclusion of the NEPA process and the decision whether to issue permits pursuant to Section 404 of the Clean Water Act (CWA).

1.2 PROJECT REQUIRING ENVIRONMENTAL ANALYSIS

The applicant group, the Cordova Hills Ownership Group hereinafter referred to as the "project applicant," proposes development of approximately 2,669 acres of land in southeastern Sacramento County (County), south of U.S. Highway 50 (U.S. 50), and east of the Rancho Cordova city limits. The property is located south of Glory Lane, southeast of Douglas Road, north of Jackson Highway (i.e., State Route 16), and east of Grant Line Road (see Exhibits 2-1 and 2-2 in Chapter 2, "Description of the Proposed Action and Alternatives").

1.2.1 THE PROPOSED ACTION

The Proposed Action includes development of the Cordova Hills Master Plan, a mixed-use development on approximately 2,669 acres adjacent to the City of Rancho Cordova, California in eastern Sacramento County. The Proposed Action represents a Federal action because it would require the issuance of a Section 404 CWA permit

for discharges into waters of the U.S. Prior to a decision on the Section 404 permit application, USACE must ensure compliance with Section 7 of the Federal Endangered Species Act for potential take of endangered or threatened species, and require issuance of a water quality certification under Section 401 of the Clean Water Act from the State of California's Central Valley Regional Water Quality Control Board.

Under the Proposed Action, approximately 39.79 acres of jurisdictional waters of the U.S. would be permanently filled on the Cordova Hills site to accommodate development, including 15.64 acres of vernal pools, 6.52 acres of intermittent drainages, 3.06 acres of seasonal wetlands, 13.87 acres of seasonal wetland swales, 0.01 acre of seep, and 0.69 acre of stock ponds. This represents approximately 45 percent of all wetlands and other waters of the U.S. on the Cordova Hills site. In addition, approximately 0.36 acre of wetlands and waters would be filled as a result of off-site road work. Thus, the total direct effects to waters of the U.S. associated with the Proposed Action would be an estimated 40.15 acres.

1.2.2 THE MODIFIED ACTION ALTERNATIVE

Following the publication of the DEIS, the project applicant has continued to adjust its proposed project to reduce effects on waters of the U.S.

Chapter 2, "Modified Action Alternative," describes the Modified Action Alternative, which incorporates these modifications to the Proposed Action. The Modified Action Alternative is the project applicant's preferred alternative. USACE will identify the alternative or alternatives that are considered to be environmentally preferable.

1.3 PROJECT PURPOSE AND NEED

The Proposed Action has been formulated to achieve the purpose and need of the project, as summarized below. The project needs and objectives, as identified by the project applicant below, define the underlying need for the project to which USACE is responding, in conformance with the requirements of NEPA (40 Code of Federal Regulations [CFR] 1502.13 and 33 CFR Part 325, Appendix B).

1.3.1 PROJECT PURPOSE

USACE views the project purpose from the purview of its responsibilities. USACE's interest extends to its permit authority with respect to regulation of waters of the U.S., including wetlands.

USACE has determined that the overall purpose is to provide a large-scale, master-planned, mixed-use development, with associated infrastructure, within the Urban Services Boundary in southeastern Sacramento County.

1.3.2 PROJECT NEEDS AND OBJECTIVES

The following summarizes the project needs as identified by the project applicant:

- ▶ Consistent with the County's General Plan policies, the Proposed Action includes approximately 204 acres of mixed-use development along Grant Line Road in an area designated "Town Center." This mixed-use development is intended to be a flexible land use that allows for a combination of retail, office, and residential

uses. The retail uses in the Town Center are designated to be regional-serving to address the shopping needs of the projected growing population in this area of the greater Sacramento region, including Cordova Hills. The office uses are likewise proposed to meet the needs of the region and of the residents who would live in the proposed Cordova Hills development. There is also a need for a variety of housing types, including age-restricted housing for seniors, a need for a university, and the need for master-planned communities that provide for extensive preservation of important natural resource areas, such as ecologically-valuable vernal pools. The housing component would not only help meet the region's housing needs, but would also integrate them into the mixed-use character of the Proposed Action. Certain smart growth goals would be achieved by allowing residents to live, work, recreate, and shop all within walking distance. The Proposed Action also identifies small pods of commercial development throughout the master plan area. These small commercial pods have been included to provide for convenient and easily accessible needs of the residents in the proposed Cordova Hills neighborhoods.

- ▶ There is an unmet need for between 1.37 million square feet and 2.05 million square feet of new commercial/retail uses in southeastern Sacramento County which the Proposed Action will satisfy. In addition, it has been forecast that there will be a 90 percent increase in population of 1.7 million people between 2002 and 2050 in Sacramento. By 2021, it has been estimated that Sacramento County will need 58,386 additional housing units. To meet that need for housing units, the Proposed Action would provide up to 8,000 new housing units that could accommodate an estimated 21,279 people. The need for the university/college campus use is shown by the fact that the need for college-educated individuals is increasing while the number of persons with higher education degrees is lagging behind.

PROJECT APPLICANT'S OBJECTIVES

Outlined below are the main objectives defined by the project applicant for the project.

- ▶ Develop a mixed-use community that is designed in a manner that provides compatible land uses and reduces overall internal vehicle trips.
- ▶ Develop an economically feasible master-planned community that minimizes its effect on biologically sensitive natural resources with on-site wetland avoidance, preservation, enhancement, and creation (if practicable).
- ▶ Develop a sustainable, multi-service town center that promotes walkability and alternative transit modes, including but not limited to NEVs, light rail, shuttle bus, and carpool facilities.
- ▶ Provide uses for two underserved markets in the southeast Sacramento region:
 - a) residential neighborhoods that are age-restricted to serve seniors, and
 - b) provide residential neighborhoods that include larger lot sizes for executive housing to serve corporate executives.
- ▶ Provide for the development of a major university/college campus center in Sacramento County.
- ▶ Develop internal project infrastructure and circulation networks of multiple modes that provide efficient connections to various land use components throughout the project; specifically, trail opportunities to enhance

the integration between the university, town center, schools, and preserves/open space corridors surrounding the project.

- ▶ Develop recreational and open space opportunities that include neighborhood and community parks and natural preserves that are fully integrated into the project through adequate trail connections and provide critical regional trail connections associated with adjacent trail systems.
- ▶ Allow for the inclusion of alternative energy sources to serve the mixed-use community.

1.4 AGENCY ROLES AND RESPONSIBILITIES

1.4.1 NATIONAL ENVIRONMENTAL POLICY ACT FEDERAL LEAD AGENCY

USACE, Sacramento District, is the lead agency under NEPA. USACE has the principal responsibility for issuing CWA Section 404 permits and ensuring that the requirements of NEPA have been met.

1.4.2 NATIONAL ENVIRONMENTAL POLICY ACT COOPERATING AGENCIES

Under NEPA, a cooperating agency is any Federal agency other than the lead agency that has jurisdiction by law or special expertise with respect to any environmental effect involved in an action requiring an EIS.

Cooperating agencies are encouraged to actively participate in the NEPA process of the lead agency, review the NEPA document of the lead agency, and use the document when making decisions on the project. USACE sent letters seeking NEPA cooperating agency interest to the EPA, California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and Sacramento County on July 11, 2011, and to the Central Valley Regional Water Quality Control Board on July 15, 2011. Of those agencies, CDFW and Central Valley Regional Water Quality Control Board did not respond to the cooperating agency invitation. On October 25, 2011, USACE received a letter from the SMAQMD requesting to be a cooperating agency on the EIS. The cooperating agencies for this project are identified below. Several agencies other than USACE and the cooperating agencies have jurisdiction over the implementation of the elements of the project, as identified below.

FEDERAL AGENCIES

- ▶ U.S. Environmental Protection Agency (NEPA Cooperating Agency)

STATE AGENCIES

- ▶ California Air Resources Board
- ▶ California Department of Education
- ▶ California Department of Fish and Wildlife
- ▶ California Department of Transportation
- ▶ State Water Resources Control Board
- ▶ Central Valley Regional Water Quality Control Board
- ▶ Native American Heritage Commission
- ▶ State Historic Preservation Officer

REGIONAL AND LOCAL AGENCIES

- ▶ Sacramento County (NEPA Cooperating Agency)
- ▶ Sacramento Metropolitan Air Quality Management District (NEPA Cooperating Agency)

1.4.3 REGULATORY REQUIREMENTS, PERMITS, AUTHORIZATIONS, AND APPROVALS

The following list identifies permits and other actions from Federal agencies for which this EIS may be used during these agencies' decisionmaking processes. The following may be under the purview of regulatory agencies other than the Federal lead agency. State, regional, and local agency approvals will rely primarily upon information provided in the EIR prepared and certified by Sacramento County pursuant to the requirements of CEQA. However, where applicable, regional and local agencies will also rely on information provided in the EIS, where the agency's jurisdiction extends over the project. Sacramento County and Sacramento Metropolitan Air Quality Management District are both NEPA cooperating agencies and have been actively participating in the NEPA process, reviewing the EIS, and will use the EIS when making decisions on the project.

FEDERAL ACTIONS/PERMITS

- ▶ **U.S. Army Corps of Engineers:** Department of the Army permit under Section 404 of the CWA for discharges of dredge or fill material into waters of the U.S. Consultation for effects on Federally listed species pursuant to Section 7 of the Federal Endangered Species Act (ESA). Consultation for effects on cultural resources pursuant to Section 106 of the National Historic Preservation Act. Ensuring compliance with Section 401 CWA through receipt of the project applicant's Section 401 Water Quality Certification. Compliance with the provisions of NEPA pursuant to 40 CFR Sections 1500-1508 and 33 CFR Part 325 Appendix B.
- ▶ **U.S. Environmental Protection Agency:** Reviewing and determining the adequacy of the EIS, filing, and noticing; review and comment on the Section 404 CWA permit and Clean Air Act Conformity Determination.
- ▶ **U.S. Fish and Wildlife Service:** Federal ESA consultation and preparation of a Biological Opinion for the potential take of Federally listed endangered and threatened species under Section 7 of the Endangered Species Act. Review and comment on the Section 404 CWA permit application under the Fish and Wildlife Coordination Act.

1.5 SUMMARY DESCRIPTION OF THE PROJECT ALTERNATIVES

The NEPA Council on Environmental Quality Regulations (40 CFR 15012.14) require that an EIS describe a range of reasonable alternatives to the Proposed Action that could feasibly attain the basic objectives of the project and avoid and/or lessen the environmental effects of the project. Chapter 2, "Description of the Proposed Action and Alternatives," of the DEIS provides a more detailed discussion of the alternatives summarized below. A No-Action Alternative, as required under NEPA, is also part of the alternatives evaluated in this EIS. The No Action Alternative is one which results in no construction requiring a USACE permit. (33 CFR Part 325 Appendix B). Because the location and extent of waters of the U.S. on the Cordova Hills site would preclude construction of a mixed-use development, the No Action Alternative in this EIS would involve no construction at all on the Cordova Hills site. Please see Chapter 2, "Modified Proposed Action," for information on the applicant's preferred alternative.

1.5.1 NO-ACTION ALTERNATIVE

Under the No Action Alternative, the Cordova Hills site would not be developed and a Section 404 permit for wetland fill would not be required from USACE. No physical changes to the Cordova Hills site would occur. Due to the configuration of waters on the Cordova Hills site and the topography, USACE determined that it is most appropriate to analyze a no-action alternative where no physical changes are made to the Cordova Hills site. Consideration of a “no action” alternative that evaluates the construction of a mixed-use development while avoiding all waters on the Cordova Hills site would be infeasible due to the widespread location and configuration of waters on the site and the topography of the site. These considerations would prohibit the construction of a mixed-use development on the site.

1.5.2 EXPANDED DRAINAGE PRESERVATION ALTERNATIVE

Under the Expanded Drainage Preservation Alternative, a substantially larger portion of the on-site drainages and seasonal wetland swales would be preserved as compared to the Proposed Action, particularly in the drainage that trends south/southwest through the central portion of the Cordova Hills site (which ultimately connects to Deer Creek south of the Cordova Hills site). This drainage would also have a 50-foot buffer zone from the adjacent residential development. The south/southwest-trending drainage in the eastern portion of the Cordova Hills site would also have increased preservation. This alternative would result in an estimated total of 921 acres of preservation, as compared to the estimated 539 acres preserved under the Proposed Action.

Under the Expanded Drainage Preservation Alternative, an estimated 18.19 acres of jurisdictional waters of the U.S. would be filled, as compared to about 39.79 acres that would be filled under the Proposed Action (a difference of about 21.60 fewer acres filled). A total of an estimated 70.92 acres of waters of the U.S. would be preserved under this alternative, as compared to an estimated 49.48 acres preserved under the Proposed Action.

1.5.3 EXPANDED PRESERVATION ALTERNATIVE

Under the Expanded Preservation Alternative, substantially more waters of the U.S., including drainages, seasonal wetland swales and vernal pools, would be preserved as compared to the Proposed Action. This alternative would also preserve the entire northwestern portion of the Cordova Hills site, which contains the largest concentration of wetland habitat. All preserved areas on the Cordova Hills site would have a 50-foot buffer zone from adjacent land uses. This alternative would result in an estimated 1,188 acres of preservation, as compared to the estimated 539 acres preserved under the Proposed Action.

Under the Expanded Preservation Alternative, 9.38 acres of jurisdictional waters of the U.S. would be filled, as compared to an estimated 39.79 acres that would be filled under the Proposed Action (a difference of about 30.41 fewer acres filled). A total of an estimated 79.72 acres of waters of the U.S. would be preserved under this alternative, as compared to an estimated 49.48 acres preserved under the Proposed Action.

1.5.4 PILATUS ALTERNATIVE

The Pilatus Alternative consists of the Cordova Hills site plus the Pilatus site, an approximately 882.5-acre property located to the north, and thereby increases the total Cordova Hills site acreage from approximately 2,668.5 to 3,551.0 acres. The Pilatus site is owned by the project applicant and the inclusion of this northern parcel for the Pilatus Alternative is a plausible extension of development for the project applicant.

A larger area of the drainage that trends south/southwest through the central portion of the Cordova Hills site would be preserved; this drainage also extends north into the Pilatus site, and it would be preserved there as well. In addition, the western preserve site (adjacent to the proposed Town Center) would be somewhat reconfigured and increased in size by approximately 36 acres. A total of approximately 962 acres (out of the approximately 3,551-acre Pilatus site) would be preserved under this alternative, as compared to the approximately 539 acres preserved (out of the approximately 2,668.5-acre Cordova Hills site) under the Proposed Action.

Under the Pilatus Alternative, approximately 33.17 acres of jurisdictional waters of the U.S. would be filled out of a total of 109.82 acres present. Under the Proposed Action, an estimated 39.79 acres would be filled out of a total of 89.11 acres present on the Cordova Hills site. Thus, under the Pilatus Alternative, an estimated 7.90 fewer overall acres of jurisdictional waters of the U.S. would be filled.

1.5.5 REGIONAL CONSERVATION ALTERNATIVE

The Regional Conservation Alternative was developed to avoid development specifically in the areas that would be preserved consistent with the Proposed Reserve System identified in the October 28, 2013 notice of preparation (NOP) published by Sacramento County for the proposed South Sacramento County Habitat Conservation Plan (SSHCP). Under this alternative, the central portion of the proposed Town Center area has been reconfigured to be more linear in nature in a north-south orientation along Grant Line Road. Along with this reconfiguration, the proposed wetland preserve area would be expanded to the west to more closely match the preservation areas identified in the NOP for the proposed SSHCP. Development in the central and eastern portions of the Cordova Hills site would remain the same as that contemplated under the Proposed Action.

Under the Regional Conservation Alternative, an estimated 38.41 acres of jurisdictional waters of the U.S. would be filled, as compared to about 39.79 acres that would be filled under the Proposed Action (a difference of about 1.38 fewer acres filled). Avoided areas in the central and eastern portions of the Cordova Hills site would remain the same as those contemplated under the Proposed Action. A total of approximately 50.69 acres of waters of the U.S. would be preserved under this alternative, as compared to an estimated 49.48 acres preserved under the Proposed Action.

1.6 REQUIREMENTS FOR RESPONDING TO COMMENTS

NEPA requires that the FEIS include and respond to all substantive comments received on the DEIS (40 CFR Section 1503.4). Lead agency responses shall include one or more of the following:

- ▶ modify the Proposed Action or alternatives;
- ▶ develop and evaluate new alternatives;
- ▶ supplement, improve, or modify the substantive environmental analyses;
- ▶ make factual corrections to the text, tables, or figures contained in the DEIS; or
- ▶ explain why no further response is necessary.

Additionally, the FEIS must discuss any responsible opposing view that was not adequately discussed in the DEIS and must indicate the lead agency's response to the issues raised.

1.7 REQUIREMENTS FOR DOCUMENT CERTIFICATION AND FUTURE STEPS IN PROJECT APPROVAL

This FEIS is being distributed to agencies, stakeholder organizations, and individuals who commented on the DEIS. This distribution ensures that interested parties have an opportunity to express their views regarding the environmental impacts of the project, and to ensure that information pertinent to permits and approvals is provided to decision makers for the lead agencies and NEPA cooperating agencies.

The FEIS and DEIS are available online at USACE's website, <http://www.spk.usace.army.mil/Missions/Regulatory/Permitting/EnvironmentalImpactStatements.aspx>.

The FEIS will be available for public review for 30 days after a notice is published in the Federal Register. Written comments should be sent to the following address:

Lisa Gibson
U.S. Army Corps of Engineers, Sacramento District, Regulatory Division
1325 J Street, Room 1350
Sacramento, CA 95814-2922
E-mail: Lisa.M.Gibson2@usace.army.mil

The EIS is intended to be used by USACE in determining whether to issue the 404 permit.

USACE will circulate the FEIS for a minimum of 30 days before taking action on the permit application and issuing its ROD. Per the requirements at 40 CFR 1505.2, the ROD shall:

- a) State what the decision is
- b) Identify all alternatives considered by USACE in reaching its decision, specifying the alternative(s) that were considered to be environmentally preferable. USACE may discuss preferences among alternatives based on relevant factors, including economic and technical considerations and USACE statutory missions. USACE shall identify and discuss all such factors including any essential considerations of national policy that were balanced by USACE in making its decision, and state how those considerations entered into its decision.
- c) State whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation.

1.8 ORGANIZATION AND FORMAT OF THE FINAL ENVIRONMENTAL IMPACT STATEMENT

This FEIS is organized as follows:

- ▶ Chapter 1, "Introduction," describes the purpose and content of the FEIS.
- ▶ Chapter 2, "Modified Proposed Action," presents information on the applicant's preferred alternative.

- ▶ Chapter 3, “Comments and Responses,” contains a list of all agencies and persons who submitted comments on the DEIS during the public review period, copies of the comment letters submitted on the DEIS, and individual responses to the comments.
- ▶ Chapter 4, “Errata,” presents corrections and other revisions to the text of the DEIS based on issues raised by comments, clarifications, or corrections. Changes in the text are signified by ~~strikeouts~~ where text is removed and by underline where text is added.
- ▶ Chapter 5, “References,” includes the references to documents used to support the comment responses.
- ▶ Chapter 6, “List of Preparers,” lists the individuals who assisted in the preparation of this FEIS.
- ▶ Appendices. New technical appendices are attached to the back of this FEIS.

The DEIS consisted of one volume plus appendices. This document and its appendices, together with the one volume and appendices of the DEIS, constitute the FEIS.

This page intentionally left blank.

2 MODIFIED PROPOSED ACTION

2.1 PROCESS OVERVIEW

The project applicant has made a series of adjustments to the project to increase the area of waters that would be preserved with implementation of the project since its initial pre-application meetings with the U.S. Army Corps of Engineers (USACE) in 2007. The project applicant submitted an initial 404 permit application in April 2008. Subsequently, adjustments were made to this application and provided to USACE in 2009. These 2009 adjustments were intended to increase the size of preserved watersheds to support the continued viability of preserved wetlands, to be more consistent with U.S. Fish and Wildlife Service (USFWS) recommendations, and to increase the proportion of vernal pools that would be preserved. The project applicant subsequently resubmitted its application with further changes in 2011. The 2011 application is analyzed in the DEIS as the Proposed Action Alternative.

The project applicant submitted a 404(b)(1) response in August of 2014, with additional areas of waters proposed for preservation. That 404(b)(1) response contained the Modified Proposed Action Alternative described in this Chapter. The Modified Proposed Action Alternative is the applicant's preferred alternative. USACE will not make a determination on whether or not to issue a permit for the Modified Proposed Action until it issues a Record of Decision (ROD) for the Cordova Hills project, which will include a determination on whether the Modified Proposed Action meets the requirements of the U.S. Environmental Protection Agency's *Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material* and whether the Modified Proposed action is contrary to the public interest.

2.2 DESCRIPTION OF THE MODIFIED PROPOSED ACTION ALTERNATIVE

The Modified Proposed Action Alternative was designed to avoid development in areas intended to be preserved by the Proposed Action Alternative, as well as to preserve additional swales and drainage features at the project site. Those additional swales and drainage features that would be placed into preserves are shown on Exhibit 2-1. This alternative would preserve approximately 56.426 acres of jurisdictional waters, which is preservation of approximately 63 percent of all jurisdictional waters on the Cordova Hills site. Proposed preserved waters of the U.S. include a swale complex in the Bufferlands area (near the southwestern corner of the site), two swale complexes in Creekside Village (near the southeastern corner of the site), and the swale complexes at the project site's eastern boundary in the Estates Village area. Under this alternative, the central portion of the Town Center area has been reconfigured to preserve a drainage/tributary feature that is part of the tributary system for Laguna Creek to the west. The northwestern plateau preserve would be expanded to approximately 384 acres (from approximately 381.2 acres), and would thereby include an estimated 28.548 acres of vernal pools; 0.875 acres of seasonal wetlands; 2.089 acres of seasonal wetland swales; 1.564 acres of intermittent drainage; and 0.835 acres of stock ponds.

Development in the central and eastern portions of the project site would be similar to the Proposed Action Alternative, although areas previously designated for agricultural and R-2 land uses would be redesignated as avoided areas ("AV") and become preserve areas. A grand total of approximately 578.0 acres would be preserved under the Modified Proposed Action Alternative compared to approximately 539 acres of preservation under the Proposed Action Alternative (see Exhibit 2-1). The total of an estimated 54.850 acres of avoided wetlands with the Modified Proposed Action Alternative would include an estimated 32.213 acres of vernal pools; 2.041 acres

of seasonal wetlands; 7.114 acres of seasonal wetland swales; 12.473 acres of intermittent drainage; 0.174 acres of creek; and 0.835 acres of stock pond.

The Modified Proposed Action Alternative would reduce the number of residential units from 8,000 in the Proposed Action Alternative to approximately 7,945 residential units, a decrease of 55 dwelling units. There would be no change in the 1,349,419 square feet of commercial and office square footage.

Under the Modified Proposed Action Alternative, a total of an estimated 34.238 acres of waters of the U.S. would be filled, compared to filling 39.630 acres by the Proposed Action Alternative (a difference of 5.392 fewer acres being filled).¹ The Modified Proposed Action Alternative would preserve and avoid an estimated 54.871 acres of waters of the U.S., including 32.217 acres of vernal pools, which is the avoidance of an estimated 62 percent of all on-site waters of the U.S. and 68 percent of all on-site vernal pools. Off-site road improvement impacts would be the same as for the Proposed Action Alternative.

Table 2-1 presents the proposed land uses in the Modified Proposed Action Alternative. Exhibit 2-2 illustrates the land use plan for the Modified Proposed Action Alternative.

2.3 WETLAND EFFECTS OF THE PROPOSED ACTION

Tables 2-2 and 2-3 present wetland effects information for the Modified Proposed Action Alternative, including a comparison to the alternatives analyzed in the DEIS and effects by type of wetland feature.

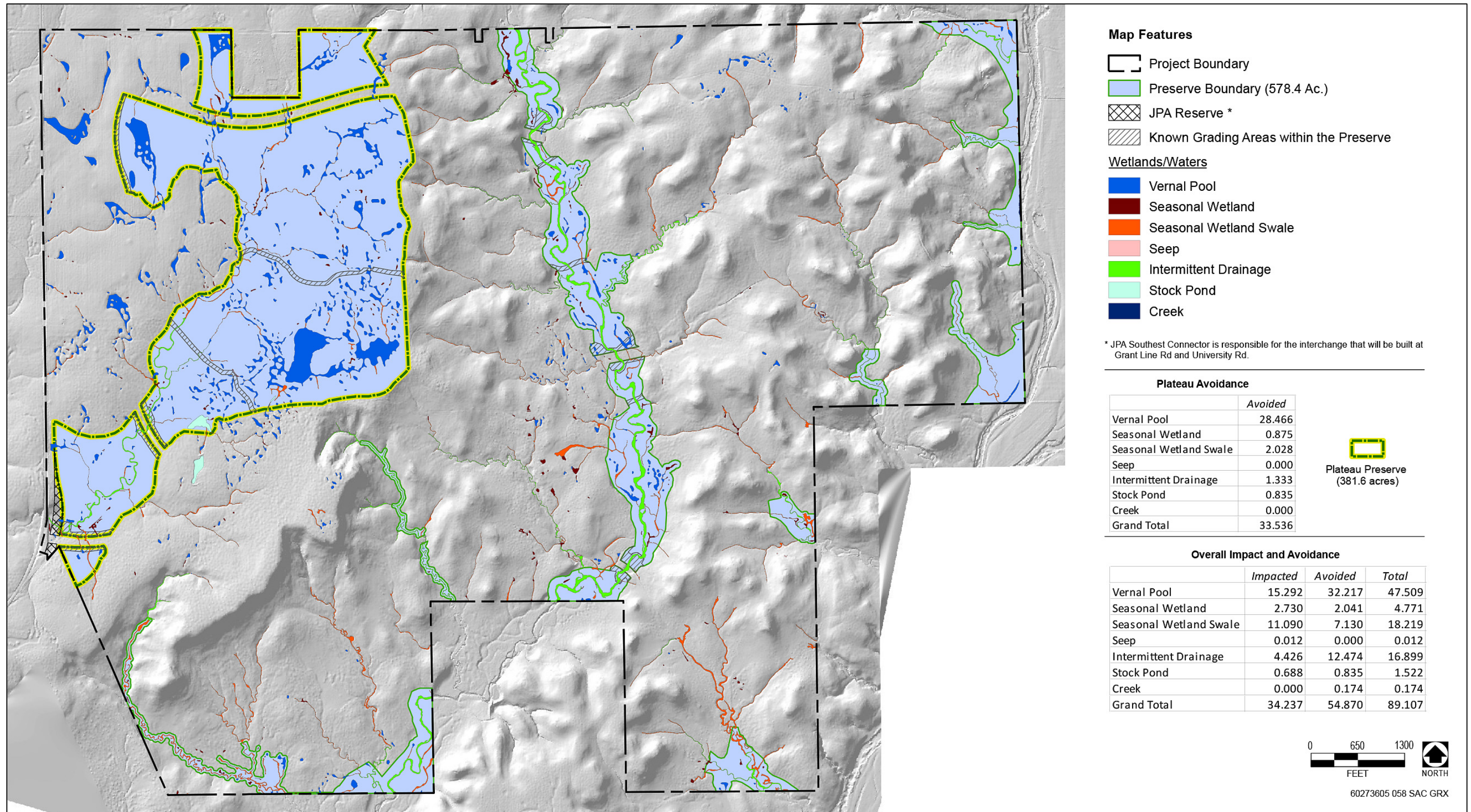
2.4 COMPARISON TO THE PROPOSED ACTION AND ALTERNATIVES

The Modified Proposed Action is similar to the Proposed Action, with expanded preserve areas, and a slight reduction in the number of residential units, from 8,000 to 7,945.

The Modified Proposed Action would have similar or reduced impacts to the Proposed Action in all of the impact areas, as summarized below:

- ▶ **Aesthetics:** Although a larger area would be included in preserves, impacts related to scenic vistas, visual character, and light and glare would be similar to those of the Proposed Action because of the similar footprint converted to urban uses.
- ▶ **Agricultural Resources and Land Use:** Effects related to conversion of farmland, Williamson Act or agricultural zoning, and consistency with blueprint principles would be similar to those of the Proposed Action because of the similar footprint converted to urban uses.
- ▶ **Air Quality:** Construction and operational effects related to consistency with air quality plans, attainment of air quality standards, cumulative contribution of air emissions, exposure of sensitive receptors to air pollutants, and odors would be similar to those of the Proposed Action because the amount of construction, future vehicle travel, and operational characteristics would be similar.

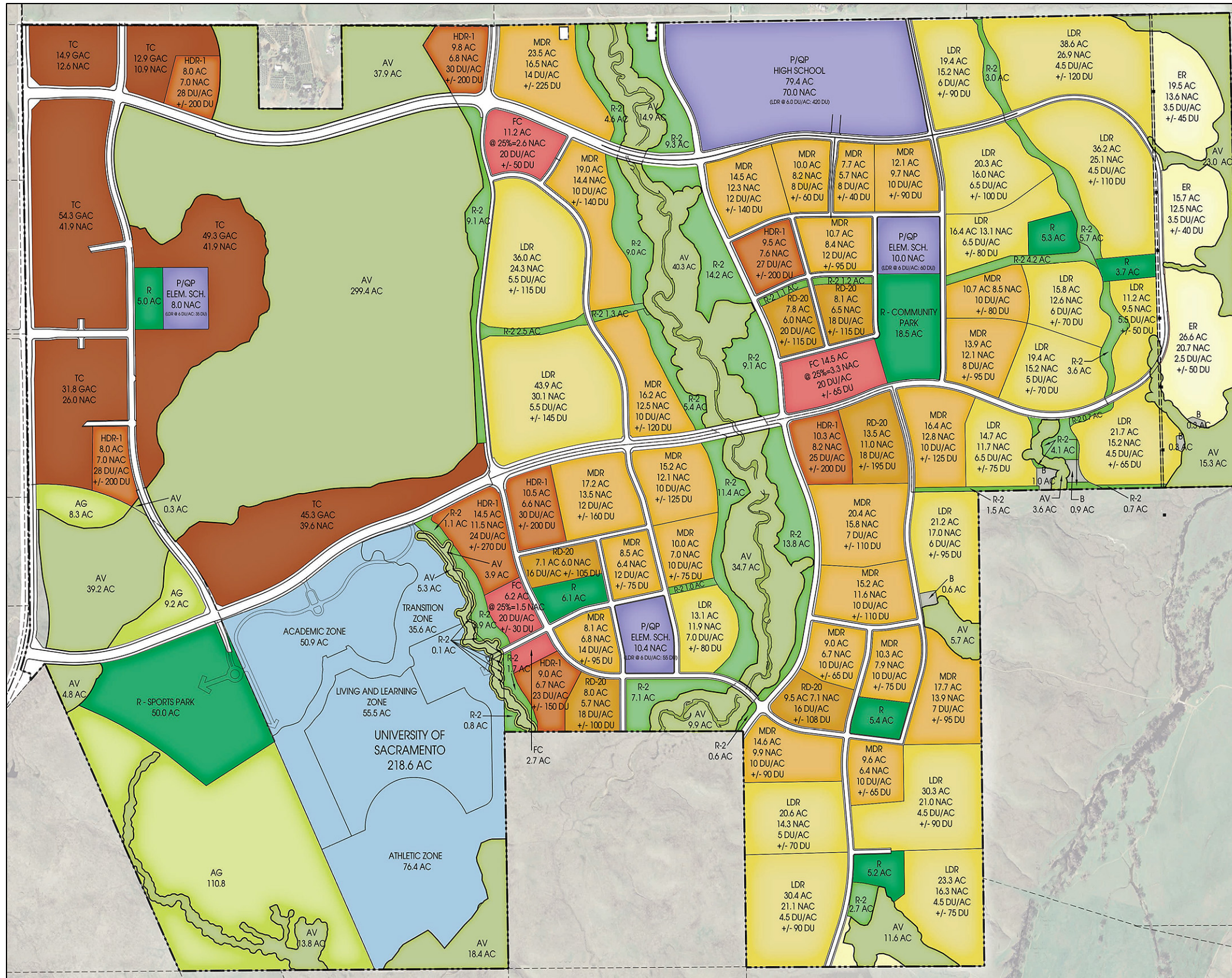
¹ Exhibit 2-1 shows a total of an estimated 34.237 acres of waters of the U.S. to be filled. This difference of 0.001 acres is due to rounding.



Source: ECRP Consulting, Inc. 2015, adapted by AECOM 2015

Exhibit 2-1.

Areas of Wetland and Water Avoidance and Effects - Modified Proposed Action



60273605 057 SAC GRX

Source: Adapted by AECOM 2015

Exhibit 2-2.

Modified Proposed Action Land Use Plan

Table 2-1 Land Use Designations and Sacramento County Permitted Uses – Modified Proposed Action and DEIS Proposed Action				
Land Use Designations		Permitted Uses	Acres	
			Modified Proposed Action	DEIS Proposed Action
AG	Agriculture	Agriculture, Sports Park, Solar Farm, District Energy Plant, Corporation Yard, Park and Ride Lot, Transit Parking Facility, Fueling Station, Roads, Storm Water and Storm Quality Basins, Community Gardens, Avoided Areas, Sewer Pump Station and Line, Water Tanks and Similar Utilities	128.3	146.3
P/QP	Public/Quasi Public	Churches, Schools, Parks, Public Utilities, Libraries, Fire Stations, Community Gardens, Flood Control and Storm Water Quality Treatment Facilities)	107.8	107.8
R	Recreation	Parks, Recreation Centers, Community Centers, Concessions, Minor Retail, Coffee Shop, Paseos, Open Space, Flood Control and Storm Water Quality Treatment Facilities	99.2	99.2
R2	Recreation and Open Space	Parks, Recreation Centers*, Community Gardens, Community Centers*, Concessions*, Minor Retail*, Coffee Shop*, Paseos, Open Space, Flood Control and Storm Water Quality Treatment Facilities	140.2	151.6
AV	Avoided Areas	Resource Avoidance, Trails, Outdoor Classroom, Interpretive Signage	578.0	540.9
ER	Estates Residential (1 to 4 du/ac)	Single Family Dwellings, Schools, Parks, Private Community Centers, Gardens, Landmark Features, Private Schools, Public Utilities, Flood Control and Storm Water Quality Treatment Facilities	64.3	64.7
LDR	Low Density Residential (4 to 7 du/ac)	Single Family Dwellings, Duplex and Halfplex Dwellings, Churches, Schools, Parks, Public and Private Community Centers, Gardens, Landmark Features, Private Schools, Public Utilities, Libraries, Fire Stations, Police Stations, Flood Control and Storm Water Quality Treatment Facilities	432.5	441
MDR	Medium Density Residential (7 to 15 du/ac)	Small Lot Single Family Dwellings, Greencourt, Motorcourt, Duplexes, Halfplexes, Townhomes, Live/Work Dwellings, Neighborhood Work Centers, Children and Senior Day Care Centers, Churches, Schools, Parks, Public and Private Community Centers, Gardens, Landmark Features Private Schools, Public Utilities, Libraries, Fire Stations, Police Stations, Flood Control and Storm Water Quality Treatment Facilities	310.5	310.5
RD20	Medium/High Density Residential (20 du/ac)	Same as MDR	54.0	54.0
HDR1	High Density Residential (20 to 30 du/ac)	Townhomes, Apartments, Live/Work Dwellings, Neighborhood Work Centers, Children and Senior Day Care Centers, Recreation Centers, Churches, Schools, Parks, Private Schools, Public Utilities, Libraries, Fire Stations, Flood Control and Storm Water Quality Treatment Facilities	79.6	79.6
FRO	Flex Residential Overlay	Flex Residential Overlay applies to LDR, MDR, RD20, and HDR uses as indicated on the FRO Map. All uses allowed in the underlying land use designations, plus Retail and Work Centers, Live/Work Dwellings, Children and Senior Day Care Centers	N/A	N/A
FC	Flex Commercial	Retail, Services and Work Center uses that serve the surrounding neighborhood	34.6	34.6
TC	Town Center	The TC land use designation consists of two distinct subareas. North of Chrysanthy Boulevard the Town Center would be an intensive mix of regional-oriented retail, services, and entertainment. South of Chrysanthy Boulevard the TC would provide more locally oriented shopping and employment opportunities. All TC designations would allow Hospital (100 bed maximum), and up to 25 percent of the net developable land area to be developed as High Density Residential in horizontal or vertical integrated configurations	204.3	204.3

Note: du/ac = dwelling units per acre.

* Uses not allowed in the Paseo Central Area

Source: Cordova Hills Master Plan 2012a:Table 4.1

Table 2-2 Summary of Estimated Wetland Effects by Alternative					
Alternative	Total Acres Existing	Total Acres of Direct Effect	Percent of Waters Directly Affected	Total Acres of On-Site Preservation	Percent of Waters Preserved
No Action Alternative	89.11	0	0	89.11	100
Proposed Action Alternative	89.11	39.79	45	49.31	54
Modified Proposed Action Alternative	89.11	34.26	38	54.85	62
Expanded Drainage Preservation Alternative	89.11	18.19	20	70.92	80
Expanded Preservation Alternative	89.11	9.38	11	79.72	89
Pilatus Alternative	109.82	33.17	30	76.65	70
Regional Conservation Alternative	89.11	38.41	43	50.69	57
Source: Data compiled by AECOM in 2015					

Table 2-3 Acreage and Type of Waters Estimated to be Directly Affected – Modified Proposed Action			
Water Type	Existing On-Site	On-Site Direct Effect	On-Site Preservation
Intermittent Drainage	16.899	4.426	12.473
Seasonal Wetland	4.771	2.730	2.041
Seasonal Wetland Swale	18.219	11.090	7.114
Seep	0.012	0.012	0.000
Vernal Pool	47.509	15.292	32.213
Carson Creek	0.174	0.000	0.174
Stock Pond	1.522	0.688	0.835
Total	89.107	34.238	54.850
Source: Data compiled by AECOM in 2015			

- ▶ **Biological Resources:** The Modified Proposed Action would include a larger preserved area than the Proposed Action, and more waters of the U.S. would be preserved (See Tables 2-1 and 2-2). Effects related to loss and degradation of jurisdictional wetlands and other waters of the U.S. would be less than those of the Proposed Action, but would be within the range of alternatives considered in the DEIS. Impacts related to take of special-status species and loss and degradation of habitat would likewise be less, but within the range of the alternatives considered in the DEIS.
- ▶ **Greenhouse Gas Emissions:** Construction and operational effects related to generation of greenhouse gas emissions (GHGs), and consistency with a GHG reduction plan would be similar to those of the Proposed Action because the amount of construction, future vehicle travel, and operational characteristics of the project would be similar.

- ▶ **Cultural Resources:** Because the footprint of ground disturbance is similar to the Proposed Action, there will be no effects related to potential destruction of or damage to known historic resources, archaeological sites, or human remains.
- ▶ **Environmental Justice:** Effects on minority and low-income populations would be similar to those of the Proposed Action because the amount and type of new residential and job-generating uses would be similar.
- ▶ **Geology, Soils, Minerals, and Paleontological Resources:** Effects related to seismic ground shaking, liquefaction, construction-related erosion, unstable or expansive soils, septic systems, loss of mineral resources, and potential damage to paleontological resources would be similar to those of the Proposed Action because of the similar footprint of ground disturbance and similar types and numbers of structures to the Proposed Action.
- ▶ **Hazardous Waste and Materials:** Effects related to inadvertent release of hazardous materials, exposure of construction workers to hazardous materials, handling hazardous waste near existing or proposed schools, reduction in emergency vehicle access or evacuation routes, blast-related injury, or wildland fire would be similar to those of the Proposed Action because the amount and type of construction and new residential and job-generating uses would be similar.
- ▶ **Hydrology and Water Quality:** Effects related to temporary-construction related drainage, flood risk and hydromodification from increased stormwater runoff, and flood risk from dam or levee failure, would be similar to those of the Proposed Action because of the similar footprint of ground disturbance and similar types and numbers of structures to the Proposed Action. Impacts related to urban runoff and groundwater recharge would be reduced compared to those of the Proposed Action because of the increased area of wetlands and waters preserved, but within the range of the alternatives considered in the DEIS.
- ▶ **Noise:** Effects related to vibration and exposure of on- or off-site noise-sensitive uses to noise, including traffic noise construction noise, aircraft noise, or noise from stationary sources, would be similar to those of the Proposed Action because the amount and type of new residential and job-generating uses, and related traffic volumes, would be similar.
- ▶ **Recreation:** Effects related to the ability of parkland to meet demand and the potential for deterioration to park facilities would be similar to those of the Proposed Action because the amount and type of new residential and job-generating uses would be similar.
- ▶ **Socioeconomics:** Effects related to burdening existing housing stock, drawing new workers from outside the project area, decreasing employment opportunities, causing a shortage of workers, and decreasing income potential for individuals or businesses would be similar to those of the Proposed Action because the amount and type of new residential and job-generating uses would be similar.
- ▶ **Public Services:** Effects related to fire protection, fire flow, police protection, and school facilities would be similar to those of the Proposed Action because the amount and type of new residential and job-generating uses would be similar.
- ▶ **Traffic and Transportation:** Effects related to increased peak-hour and daily traffic volumes, construction traffic, and increased demand for alternative modes of transportation would be similar to those of the

Proposed Action because the amount and type of new residential and job-generating uses, as well as roadway connections to the Cordova Hills site, would be similar.

- ▶ **Utilities and Service Systems:** Effects related to wastewater collection and conveyance facilities; wastewater treatment plant facilities; solid waste disposal; electrical, natural gas, and communications facilities and infrastructure; and energy demand would be similar to those of the Proposed Action because the amount and type of new residential and job-generating uses would be similar.
- ▶ **Water Supply:** Effects related to increased demand for water supplies and on- and off-site water conveyance, storage, and treatment facilities would be similar to those of the Proposed Action because the amount and type of new residential and job-generating uses would be similar.

The Modified Proposed Action differs from the Proposed Action primarily in the amount of direct effects to jurisdictional waters of the U.S. and the size of the preserved area, with similar land uses, a similar number of residential units, similar area of job-generating land uses, and a similar development footprint to the Proposed Action. USACE has determined that the Modified Proposed Action does not result in substantial changes in the Proposed Action that are relevant to environmental concerns and does not result in new significant circumstances or information relevant to environmental concerns and bearing on the Proposed Action or its impacts, and therefore a supplemental DEIS is not necessary.

2.5 RESIDUAL SIGNIFICANCE OF AQUATIC RESOURCE EFFECTS

As discussed in the DEIS, some of the effects on aquatic resources are identified as “potentially significant”, as sufficient information regarding compensatory mitigation had not been received at the time of the DEIS for USACE to determine if mitigation measures would reduce these effects to less than significant. In order to reduce these potentially significant effects to non-significance, the project applicant has been developing a Wetland Mitigation Proposal for review and approval by USACE. The project applicant’s Wetland Mitigation Proposal is attached as Appendix A. The project applicant developed this Wetland Mitigation Proposal in accordance with the USACE 2008 mitigation rule (33 CFR 332), the Corps South Pacific Division mitigation guidance (South Pacific Division Final 2015 Regional Compensatory Mitigation and Monitoring Guidelines (USACE 2015)) and Cordova Hills’ specific guidance from USACE. The project applicant believes that the Wetland Mitigation Proposal will reduce all effects to the aquatic environment to less than significant.

The Wetland Mitigation Proposal has not been reviewed by USACE to the extent necessary to determine if sufficient compensatory mitigation is proposed to reduce the loss and degradation of USACE jurisdictional vernal pools and other wetland habitats and other waters of the U.S. (e.g., intermittent drainage channels, stock ponds) to a less-than-significant level. In addition, USACE is currently working with the applicant on potentially practicable alternatives to the Proposed Action and Modified Proposed Action that would have fewer effects on waters of the U.S. USACE will make a decision regarding the least environmentally damaging practicable alternative, required compensatory mitigation, and compliance with the U.S. Environmental Protection Agency’s *Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material* in the ROD following a review of all comments on the FEIS, completion of consultation under Section 7 of the Endangered Species Act, receipt of a Section 401 Water Quality Certification or waiver, and completion of coordination with the applicant. USACE will issue a permit for the Modified Proposed Action only if the following determinations are made:

- 1) The Modified Proposed Action is in compliance with the U.S. Environmental Protection Agency's (EPA's) Section 404(b)(1) Guidelines. To be in compliance with the Section 404(b)(1) Guidelines, USACE must be able to make the following determinations:
 - a) It has been demonstrated that there are no practicable nor less damaging alternatives which could satisfy the action's overall project purpose.
 - b) The proposed activity would not violate applicable State water quality standards or Section 307 prohibitions or effluent standards.
 - c) The proposed activity would not jeopardize the continued existence of federally listed threatened or endangered species or result in destruction or adverse modification of critical habitat.
 - d) The proposed activity would not violate the requirements of a federally designated marine sanctuary.
 - e) The activity would not cause or contribute to significant degradation of waters of the U.S., including adverse effects on human health; life stages of aquatic organism's ecosystem diversity, productivity and stability; and recreation, aesthetic, and economic values.
 - f) All appropriate and practicable steps have been taken to minimize potential adverse effects of the discharge on the aquatic ecosystem.
- 2) The Modified Proposed Action is not contrary to the public interest after taking into account the following:
 - a) The relative extent of the public and private need for the proposed structure or work.
 - b) Where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the object of the proposed structure or work; and
 - c) The extent and permanence of the beneficial and/or detrimental effects which the proposed structure or work is likely to have on the public and private uses to which the area is suited.
- 3) The Modified Proposed Action is in compliance with all other applicable Federal-laws and requirements, including Section 7 of the Endangered Species Act and Section 401 of the Clean Water Act.

This page intentionally left blank.

3 COMMENTS AND RESPONSES

3.1 INTRODUCTION

This chapter contains the comment letters received on the Draft Environmental Impact Statement (DEIS) for the Cordova Hills project. A list of each commenter on the DEIS, associated agencies, and assigned letter numbers are provided in Section 3.2. Section 3.3 presents each comment letter received on the DEIS and the responses thereto. Each comment contained in the comment letter is summarized in *italics* at the beginning of each comment response in Section 3.3.

3.2 LIST OF COMMENTERS ON THE DEIS

Table 3-1 presents the numerical designation for each comment letter received, the author of the comment letter, the date of the comment letter, and the number of individual comments identified and addressed in each comment letter.

Table 3-1 Comment Letters Regarding the DEIS			
Comment Letter ID	Commenting Entity	Author	Date
Federal Agencies			
USDOJ	U.S. Department of the Interior	Patricia Sanderson Port	January 12, 2015
USEPA	U.S. Environmental Protection Agency	Jane Diamond and Kathleen H. Johnson	January 28, 2015
USEPA_2	U.S. Environmental Protection Agency	Jared Blumenfeld	February 19, 2015
USFWS	U.S. Fish and Wildlife Service	Jennifer M. Norris	October 2, 2015
Regional and Local Agencies and Organizations and Individuals			
SACDOT	Sacramento County Department of Transportation	Kamal Atwal	January 12, 2015
CNPS	California Native Plant Society	Carol W. Witham	January 12, 2015
SMAQMD	Sacramento Metropolitan Air Quality Management District	Rachel DuBose	January 29, 2015
Wood	Region Builders	Joshua Wood	January 15, 2015
Budge	Rancho Cordova City Councilmember	Linda Budge	January 28, 2015
Nottoli	Sacramento County 5 th District Supervisor	Don Nottoli	January 28, 2015
CSECJPA	Capital Southeast Connector JPA	Tom Zlotkowski	February 26, 2015
Wheatley	Tsakopoulos Investments	Kate A. Wheatley	January 23, 2015

3.3 FORMAT OF COMMENTS AND RESPONSES

Comment letters and responses to comments are arranged in the following order:

- ▶ Federal Agencies

► Regional and Local Agencies, Organizations, and Individuals

Each letter and each comment within a letter have been given an identification number. Responses are numbered so that they correspond to the appropriate comment. Where appropriate, responses are cross-referenced between letters or with a master response.

3.4 COMMENTS AND RESPONSES ON THE DEIS

The written individual comments received on the DEIS and the responses to those comments are provided in this section. Each comment letter is reproduced in its entirety and is followed by the response(s) to the letter. Where a commenter has provided multiple comments, each comment is indicated by a line bracket and an identifying number in the margin of the comment letter.



United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Pacific Southwest Region
333 Bush Street, Suite 515
San Francisco, CA 94104

IN REPLY REFER TO:
(ER 14/0756)

Filed Electronically

12 January 2015

Lisa Gibson
U.S. Army Corps of Engineers
Sacramento District
Regulatory Branch
1325 J Street, Room 1350
Sacramento, CA 95814-2922

Subject: Review of the Draft Environmental Impact Statement (DEIS) for the Cordova Hills Project, Sacramento County, CA

Dear Ms. Gibson:

The Department of the Interior has received and reviewed the subject document and has no comments to offer.

Thank you for the opportunity to review this project.

Sincerely,

Patricia Sanderson Port
Regional Environmental Officer

cc:
OEPC Staff Contact: Loretta B. Sutton, (202) 208-7565; Loretta_Sutton@ios.doi.gov

USDOI-1

Letter U.S. Department of the Interior
USDOJ Patricia Sanderson Port, Regional Environmental Officer
Response January 12, 2015

USDOJ-1 *The comment indicates that the U.S. Department of the Interior (USDOJ) has reviewed the DEIS for the Cordova Hills Project and has no comments.*

USACE acknowledges receipt of the letter from USDOJ indicating that it has no comments on the DEIS.



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

JAN 28 2015

Colonel Michael Farrell
U.S. Army Corps of Engineers
1325 J Street, 14th floor
Sacramento, California 95814-2922

Subject: Public Notice SPK-2004-00116 and Draft Environmental Impact Statement for the proposed Cordova Hills Project, Sacramento County, California [CEQ #20140338]

Dear Colonel Farrell:

The U.S. Environmental Protection Agency (EPA) has reviewed the subject Draft Environmental Impact Statement (DEIS), as well as the Public Notice (PN) for an associated application for a Clean Water Act Section 404 permit, identified by your office's December 4, 2014 Notice of Availability (NOA). The proposed Cordova Hills mixed-use residential development would involve the elimination of over 40 acres of waters of the United States (waters), including rare, high-functioning vernal pool wetlands. The enclosed detailed comments were prepared pursuant to EPA authorities under the National Environmental Policy Act (NEPA), the Clean Water Act (CWA), and the Clean Air Act.¹

USEPA-1

The EPA objects to issuance of a CWA Section 404 permit for the project as proposed because the discharges to waters represent an unmitigated contribution to the significant degradation of vernal pools, and thus a substantial and unacceptable impact to aquatic resources of national importance.² It appears that the Proposed Action may not be the least environmentally damaging practicable alternative (LEDPA) and that further analysis of alternatives is needed. We recommend, therefore, that the Corps not permit the project as proposed and work with the EPA during development and identification of the LEDPA and mitigation planning.

USEPA-2

USEPA-3

Based on these potential impacts, we have rated the DEIS as *Environmental Objections-Insufficient Information* (EO-2). Please see the enclosed "Summary of EPA Rating Definitions." We are also concerned about the project's potential impacts on air quality and climate change.

USEPA-4

¹ The White House Council on Environmental Quality's (CEQ) NEPA Implementation Regulations at 40 CFR 1500-1508; the Federal Guidelines (40 CFR 230) restricting discharges of dredged or fill material to Waters of the United States promulgated under §404(b)(1) of the CWA; and EPA's NEPA review authority under Section 309 of the Clean Air Act.

² This letter also follows the field level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of the Army, Part IV, paragraph 3(a) regarding Section 404(q) of the Clean Water Act.

The outstanding biological resources at the project site include over 100 acres of some of the most intact and high-functioning vernal pool habitat remaining in the state. The site supports ten listed and/or special concern species, and is representative of the habitats that occurred widely across the "Mather Core Recovery Area" in the early 20th century.

USEPA-5

The Cordova Hills proposal exists in the landscape context of the larger South Sacramento Habitat Conservation Plan (SSHCP), conceived and developed among diverse stakeholders in wide recognition of the cumulative and significant historical degradation of Sacramento County's vernal pool landscapes. Along with the Sacramento County Association of Governments, County of Sacramento, the Cities of Rancho Cordova and Galt, the Southeast Connector Joint Powers authority, and other key environmental and regulatory stakeholders, our staffs have worked collaboratively on the SSHCP with the goal of developing a framework that provides 50 years of development certainty for the regulated public, while addressing the considerable cumulative loss of vernal pool wetlands and listed species in the plan area. Absent an integrated, regional approach to the conservation of what remains, impacts at the scale proposed by Cordova Hills may no longer be sustainable given the extremely limited remaining mitigation opportunities. The SSHCP is near completion and provides a regional context for such compensatory mitigation, and a monitoring and preserve management framework that is otherwise unavailable to individual permit applicants such as Cordova Hills.

USEPA-6

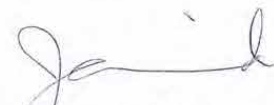
If the Cordova Hills project proceeds in advance of a viable regional conservation framework, we recommend that the Final Environmental Impact Statement (FEIS) provide additional information demonstrating the project's compliance with CWA Section 404(b)(1), and further describe the project's potential impacts from criteria air pollutants and greenhouse gases.

USEPA-7

USEPA-8

Thank you for considering our enclosed recommendations for improving the Cordova Hills project application and EIS, and for your ongoing partnership in implementing the regulatory programs of the CWA. We will continue to work with your staff and the applicant to resolve the important environmental issues concerning the proposed project. If you wish to discuss the 404 issues, please call Jane Diamond at (415) 972-3275, or have your Regulatory Division Chief contact Jason Brush at (415) 972-3483. If you wish to discuss our NEPA comments, please call Kathleen Johnson at (415) 972-3873, or have your staff call Kathleen Goforth, Manager of our Environmental Review Section, at (415) 972-3521.

Sincerely,


Jane Diamond, Director
Water Division


Kathleen H. Johnson, Director
Enforcement Division

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

cc: Jennifer Norris, U.S Fish and Wildlife Service, Sacramento Office
Elizabeth Lee, Central Valley Regional Water Quality Control Board
Tina Bartlett, California Department of Fish and Game, South Coast Region
Michael McKeever, Sacramento Area Council of Governments
Brad Hudson, County Executive, Sacramento County

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

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

"EC" (Environmental Concerns)

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

"EO" (Environmental Objections)

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

"EU" (Environmentally Unsatisfactory)

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

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

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

"Category 2" (Insufficient Information)

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

"Category 3" (Inadequate)

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

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

U.S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT AND CWA 404 APPLICATION FOR CORDOVA HILLS, SACRAMENTO COUNTY, CA, JANUARY 2015

Clean Water Act (CWA) Compliance

Prior to granting a permit pursuant to Section 404 of the CWA, the Corps must determine that the project complies fully with *Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials* (“Guidelines” at 40 CFR 230), promulgated pursuant to CWA Section 404(b)(1), and is not contrary to the public interest. Based on the information presented to date, however, the applicant has not demonstrated that the Proposed Action complies with all of the restrictions to discharges under the Guidelines related to alternatives analysis, water quality, endangered species, significant degradation, and/or mitigation. We offer the following comments regarding the project’s compliance with the Guidelines.

USEPA-9

Alternatives Analysis – 40 CFR 230.10(a)

As EPA explained at a July 19, 2010 scoping meeting sponsored by the Governor’s Office of Planning and Research in Sacramento, we believe that less damaging practicable alternatives exist elsewhere for Cordova Hills’ development purposes and that the applicant has not overcome the Guidelines’ rebuttable presumption that this is so. The Proposed Action appears to have been inappropriately set to align with the applicant’s very specific development objectives (8,000 units in six “Villages” with a regional university). In order to practicably meet the project purposes, the project does not need to be the size the applicant has proposed.

USEPA-10

USEPA-11

Furthermore, Appendix C (“404(b)(1) Alternatives Information”) of the DEIS identifies an alternative not analyzed in the DEIS, the Modified Proposed Action Alternative, as practicable and less environmentally damaging than the Proposed Action. While we recognize that it is the responsibility of your office to make a determination regarding the least environmentally damaging practicable alternative (LEDPA), the applicant’s analysis suggests that this Modified Proposed Action Alternative is practicable and, therefore, should have been evaluated in the DEIS.

USEPA-12

In addition, we disagree with the practice of comparing the costs of each alternative to the Proposed Action. The proper cost comparison under the regulations is to a typical project of similar purposes in the market area. We have also previously raised issues with combining the university with the mixed-use commercial/residential development, as it is our belief that these have different purposes and should be analyzed separately. For these reasons, as well as the identification of the Modified Proposed Action Alternative as practicable and having fewer impacts, it appears that the Proposed Action Alternative is not the LEDPA.

USEPA-13

USEPA-14

USEPA-15

As the alternatives analysis is “the heart of the environmental impact statement,” the EIS “should present the impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public.” (40 CFR 1502.14) We do not believe that the DEIS provides sufficient information to demonstrate that the Proposed Action is the LEDPA in compliance with the Guidelines.

USEPA-16

Recommendations:

- Fully analyze in the FEIS one or more alternatives that comply with the Guidelines, and document how the alternative(s) comply with the Guidelines. The Modified Proposed Action Alternative should be fully analyzed.
- Identify the Corps' Preferred Alternative, the Environmentally Preferable Alternative, and the LEDPA in the FEIS, and explain the bases for these designations.
- Rectify in the FEIS the existing discrepancies between the DEIS and Appendix C, and include a completed CWA Section 404(b)(1) alternatives analysis.

USEPA-17
USEPA-18
USEPA-19

Compliance with other Environmental Standards – 40 CFR 230.10(b)

EPA remains concerned that the project's impacts to 16.90 acres of intermittent drainages and Carson Creek could adversely affect Laguna Creek and the Cosumnes River downstream. The Cosumnes River, valued statewide for its extraordinary aquatic resources, is currently listed on the 303(d) list as impaired for bacteria, invasive species, and sediment, and we are concerned that projects of this magnitude can exacerbate downstream water quality issues. It remains to be determined, however, whether the proposed project could cause or contribute to violations of state water quality standards, as the Central Valley Regional Water Quality Control Board has yet to evaluate a CWA Section 401 water quality certification application for this project.

USEPA-20

It also remains to be determined whether the project would jeopardize the continued existence of, or critical habitat for, several threatened or endangered species, as the U.S. Fish and Wildlife Service (FWS) has yet to produce a Biological Opinion on this project. The FWS' Biological Opinion is critical to determination of compliance with the 404(b)(1) Guidelines 230.10(b).

USEPA-21

Recommendations:

- Demonstrate in the FEIS how the project will ensure existing water quality standards are met.
- Analyze the project in a regional watershed planning context with respect to its potential take of listed species (possibly as a component of a Habitat Conservation Plan).
- If the project proceeds separately from a Habitat Conservation Plan, we recommend that the FEIS:
 - Discuss the project's consistency with the mitigation requirements of the SunRidge Record of Decision; and
 - Include the rationale for endangered species compliance for this permit action.

USEPA-22
USEPA-23
USEPA-24
USEPA-25

Cumulative Impacts and Significant Degradation -- 40 CFR 230.10(c)

Section 230.10(c) prohibits discharges that will cause or contribute to significant degradation of the waters of the United States. Significant degradation may include individual or cumulative impacts to human health and welfare; fish and wildlife; ecosystem diversity, productivity and stability; and recreational, aesthetic or economic values. Vernal pool wetlands in general, but in south Sacramento County in particular, have been significantly degraded historically, and the Cordova Hills project lacks appropriate mitigation to ensure that it does not further contribute to this degradation.

USEPA-26

According to recent studies on the status of these vulnerable aquatic resources, California's vernal pools continue to sustain an unacceptable level of destruction. An estimated 135,000 acres of vernal pool grasslands were lost between 1995 and 2005, with 6,598 acres of Sacramento County vernal pool grasslands lost during this period.³ Between 2005 and 2012, an additional 1,563 acres of wetlands in the Great Valley have been lost.⁴

We are aware of several reasonably foreseeable projects in the immediate vicinity of the Cordova Hills project site which either have or are seeking CWA 404 permits. These projects together would fill approximately 330 acres of waters of the U.S. (DEIS, Table 3.0-2). Considering the large number of projects in the Sacramento County area that have already been constructed, the unmitigated losses due to agricultural conversions, and the reasonably foreseeable additional impacts of future projects, this project would exacerbate the ongoing significant degradation of vernal pool resources in southern Sacramento County.

The ecosystem diversity of the Cordova Hills and adjacent Pilatus sites is known to be outstanding based on the presence of numerous rare or endangered species and the extent of intact vernal pool complexes, named and unnamed drainages, seasonal wetlands and other waters of the U.S. These outstanding biological resource values include over 100 acres of some of the most intact and high-functioning vernal pools remaining in the state. These habitats are representative of the kinds of resources that occurred widely across the Mather Core Recovery Area before urban development destroyed the majority of the habitat.

Recommendation: Demonstrate in the FEIS that this project would not cause or contribute to significant degradation of the aquatic ecosystem, in accordance with the Guidelines.

Avoidance, Minimization, and Compensation -- 40 CFR 230.10(d)

Section 230.10(d) prohibits discharges unless all appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem. Cordova Hills has proposed to fragment the avoided areas into 12 separate parcels. This habitat fragmentation, while protecting the stated wetted surface acres of wetlands, does little to maintain the integrity of the aquatic ecosystem. To the contrary, it creates "edge effects" which are known to add environmental stressors on existing habitats (Saunders et al. 1991).⁵ Many organisms move in and out of wetlands or are known to respond negatively to human

³ Holland, R.F. 2009. California's Great Valley Vernal Pool Habitat Status and Loss: Rephotorevised 2005. Prepared for Placer Land Trust.

http://www.vernalpools.org/vpreports/Great%20Valley%20Vernal%20Pool%20Distribution_Final.pdf

⁴ Witham, C.W., R.F. Holland and J.E. Vollmar. 2013. 2005 Great Valley Vernal Pool Map, Plus Merced, Placer and Sacramento County Losses 2005-2010. Sacramento, CA. Report prepared for the U.S. Fish and Wildlife Service and Bureau of Reclamation CVPIA Habitat Restoration Program under Grant Agreement No. 80270-A-G509 with the USFWS.

Witham, C.W., R.F. Holland and J.E. Vollmar. 2014. Changes in the Distribution of Great Valley Vernal Pool Habitats from 2005 to 2012. Sacramento, CA. Report prepared for the U.S. Fish and Wildlife Service and Bureau of Reclamation CVPIA Habitat Restoration Program under Grant Agreement No. F11AP00169 with the USFWS.

⁵ Saunders, D.A., R.J. Hobbs, and C.R. Margules. 1991. Biological consequences of ecosystem fragmentation: a review. *Conservation Biology*. Vol. 5: 1, pp 18-32.



encroachment. A site-specific example of this is the western spadefoot, which is negatively phototaxic and will stop breeding in response to light pollution.

↑ USEPA-30

In addition, the proposed compensatory mitigation actions for this project would result in a net loss of waters of the United States and are, therefore, not sufficient, particularly for permittee-responsible projects (as opposed to bank or in-lieu fee credits) under existing South Pacific Division procedures (the ratio “checklist”) and the 2008 compensatory mitigation rule. In addition, the proposed onsite and offsite mitigation locations are small, involve creating vernal pools at unnaturally high densities, and would result in additional habitat fragmentation. This compensation plan also relies on preserved waters of the U.S. to meet mitigation objectives, which can only occur under the regulations if all five substantive requirements are met (40 CFR 230.93(h) i-v). The DEIS does not disclose whether all of the criteria for preservation have been met. We are concerned, however, that there will likely be few credits available for the proposed preserved waters on the Cordova Hills project site and the three offsite locations.

USEPA-31
USEPA-32
USEPA-33
USEPA-34

Recommendations: Document the availability of mitigation for this project in the FEIS, and include a revised mitigation plan that shows compliance with the South Pacific Division’s recently published mitigation guidelines. This includes documenting the project’s ability to fully and appropriately offset the loss of nearly 40 acres of outstanding vernal pool, seasonal wetland, and stream habitats.

USEPA-35
USEPA-36

Air Quality

Criteria Pollutants

Based on the discussion in the DEIS regarding direct and indirect air emissions, it is unclear whether Table 3.3-6 includes both direct and indirect construction emissions. The DEIS (p. 3.3-22) incorrectly states that a General Conformity analysis is only applicable to the project’s direct emissions, in this case, the direct construction emissions resulting from earth fill activities. The General Conformity rule at 40 CFR Section 93.153(b), however, applies to “the total of direct and indirect emissions in a nonattainment or maintenance area caused by a Federal action.” Indirect emissions are defined as “those emissions of a criteria pollutant or its precursors that: (1) Are caused by the Federal action, but may occur later in time and/or may be further removed in distance from the action itself but are still reasonably foreseeable; and (2) The Federal agency can practicably control and will maintain control over due to a continuing program responsibility of the Federal agency.” 40 CFR Section 93.152. EPA recognizes that the Corps will not maintain practicable control over emissions after the permitted actions have been completed; however, both the direct and indirect emissions of project construction, which are subject to CWA 404 permit approval, are subject to the conformity rule.

USEPA-37
USEPA-38

Recommendation: Clarify this distinction in the FEIS, and ensure that the projected air pollutant emissions in Table 3.3-6 reflect both direct and indirect emissions from construction activities for the purpose of comparison with the conformity rule *de minimis* thresholds.

USEPA-39

EPA is concerned that the proposed action would result in significant cumulative impacts to air quality due to operational emissions in the Sacramento Valley Air Basin. As stated above, EPA is aware of multiple federal development projects, in which the Corps is involved, and which are

USEPA-40
↓

planned in the Sacramento Valley Air Basin for the same general time period as the proposed Cordova Hills project. In discussing cumulative impacts to air quality, the DEIS (p. 3.3-40) refers to Table 3.3-7, which provides operational emissions estimates (in tons per year) for only the Proposed Action. The DEIS does not, however, quantify cumulative air quality impacts associated with specific reasonably foreseeable projects in the cumulative effects study area. Such information helps clarify the intensity of cumulative impacts, as well as future challenges the region would face in attaining federal air quality standards. EPA understands that such information is available and was incorporated into existing Corps documents (i.e., Placer Vineyards and Westbrook DEISs).

↑
USEPA-40
USEPA-41

Recommendation: Evaluate cumulative emissions for potential contributions to violations of the National Ambient Air Quality Standards. Provide a table in the FEIS with criteria air pollutant and precursor emissions estimates from all applicable reasonably foreseeable future actions located within the geographic scope of the cumulative air analysis (where information is readily available). The table should include, for each project, emissions from both construction and operational phases, project size (in acres), and the number of residential units planned.

USEPA-42

Greenhouse Gas Emissions

According to the DEIS (p. 3.5-17), even with implementation of Final Environmental Impact Report Mitigation Measure CC-1, per capita transportation emissions associated with all of the action alternatives would exceed the Sacramento County Climate Action Plan’s April 2011 threshold of significance, and project-related operational greenhouse gas emissions would remain significant and unavoidable.

USEPA-43

EPA is also concerned that the proposed project may not be consistent with the Metropolitan Transportation Plan/Sustainable Community Strategy (MTP/SCS), a consensus of 22 cities and six counties (including Sacramento County). The DEIS (p. 3.5-20) cites the Sacramento Area Council of Government’s (SACOG) 2012 determination that the proposed project could make the region’s ability to meet the 2035 greenhouse gas emissions reduction target pursuant to SB 375 challenging under the “without university” scenario. SACOG also determined that the proposed project would create higher transportation greenhouse gas emissions relative to other development opportunities in the region, with or without a university, and these emissions would be significantly greater without a university.⁶ SACOG has indicated that, with or without a university, Cordova Hills will face challenges being included in the next MTP/SCS, largely based on market feasibility considerations, and may require some additional efficiencies elsewhere in the region’s land use and transportation system beyond those included in the current MTP/SCS.

USEPA-44
USEPA-45
USEPA-46

Furthermore, while we acknowledge the applicant’s strong desire to include a university at Cordova Hills, we remain concerned that it does not appear reasonably foreseeable. SACOG (2012) has also indicated some doubt about the reality of a university at the site by 2035. If a university is not developed at Cordova Hills, the DEIS significantly underestimates both criteria

USEPA-47
↓

⁶ SACOG memorandum from Mike McKeever, Chief Executive Officer, to Sacramento County Supervisors, dated January 22, 2012, Subject: Response to Cordova Hills Questions.

pollutant and greenhouse gas emissions projections for the proposed project. We have previously recommended that the DEIS assess the impacts of the “without university” scenario for each alternative, but this not been done.

↑
USEPA-47

Recommendation: For each alternative, we recommend that the FEIS include both the greenhouse gas and criteria pollutant emissions estimates under the “without university” scenario, and discuss the implications of the project not being included in the MTP/SCS.

↑
USEPA-48

USEPA-1 *The comment states that the U.S. Environmental Protection Agency (EPA) objects to the project as proposed because the discharges to water represent an unmitigated contribution to the significant degradation of vernal pools, and thus a substantial and unacceptable impact to aquatic resources of national importance.*

A thorough analysis of the Proposed Action's effects on aquatic resources is provided on pages 3.4-31–38 of the DEIS. All relevant and reasonable mitigation measures that could alleviate the adverse effects of the action alternatives on aquatic resources are provided on pages 3.4-38 through 3.4-42 of the DEIS, per NEPA requirements, and a Conceptual Wetland Mitigation Plan is provided as Appendix N. The cumulative effects of the Proposed Action and action alternatives on aquatic resources are analyzed on pages 3.4-88 and 89. The DEIS acknowledges that effects on aquatic resources would potentially be significant even with implementation of all relevant and reasonable mitigation, as USACE has not yet determined if the proposed compensatory mitigation would compensate for the proposed loss and degradation of waters of the U.S. on the site. Since publishing of the DEIS, the applicant has modified the proposed action to include additional preservation of waters of the U.S., as described in Chapter 2 of the FEIS. The modified proposed action is identified in the FEIS as the Applicant's Preferred Alternative, as required by 333 CFR Part 325 Appendix B. The USACE will make a final permit decision on the Applicant's Preferred Alternative in the Record of Decision (ROD), including compliance with the CWA Section 404(b)(1) Guidelines. USACE will not issue a permit for any alternative in which it is determined that the alternative would cause or contribute to significant degradation of the waters of the U.S. In its comment, EPA does not provide specific additional mitigation measures that it would like to see incorporated to further reduce the adverse effects of the Proposed Action on vernal pools or other aquatic resources.

USEPA-2 *The comment states that the Proposed Action may not be the least environmentally damaging practicable alternative (LEDPA) and that further alternatives analysis is needed.*

The Draft CWA Section 404(b)(1) Alternatives Information (DEIS Appendix C), which was prepared by the project applicants, contains additional on-site alternatives to the Proposed Action. USACE continues to coordinate with the applicant on the alternatives information, in order to ensure that impacts to waters of the U.S. associated with the discharge of dredged and/or fill material are avoided and minimized to the maximum extent practicable. As part of this coordination, the applicant has revised the Proposed Action to further reduce direct adverse effects to waters of the U.S. on the site. This "Modified Proposed Action" is identified as the Applicant's Preferred Alternative in the FEIS and described in Chapter 2, "Modified Proposed Action." USEPA has attended a variety of meetings with the applicant, including pre-application meetings, and other meetings related to the Proposed Action identified in the DEIS. Following receipt of the EPA comment letters, USACE requested a meeting with EPA to discuss additional avoidance, minimization, and compensation that EPA would like to see on the Cordova Hills site. EPA declined to attend a meeting and to date, USACE has not received a recommendation from

EPA on additional measures for avoidance and minimization of waters of the U.S. that may be practicable, or additional compensatory mitigation that may be appropriate. The project applicant will provide the updated alternatives information to EPA for review and comment, and EPA will continue to be provided the opportunity to review and comment on the CWA Section 404(b)(1) alternatives information prepared by the project applicant. Per the CWA Section 404(b)(1) Guidelines, no discharge of dredged and/or fill material shall be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences (40 CFR 230.10[a]). USACE will make a final permit decision on the Proposed Action in the ROD, including compliance with the CWA Section 404(b)(1) Guidelines.

USEPA-3 *EPA recommends that USACE not permit the project as proposed and work with EPA during development and identification of the LEDPA and mitigation planning.*

See response to comment USEPA-2.

USEPA-4 *The comment notes that EPA has rated the DEIS as Environmental Objections - Insufficient Information (EO-2) and that EPA is concerned about the project's potential impacts on air quality and climate change.*

USACE acknowledges EPA's rating of the DEIS. Please refer to the responses to comments USEPA-27 through USEPA-48, which address the specific issues raised by EPA with respect to air quality and climate change impacts.

USEPA-5 *The comment states that outstanding biological resources at the project site include over 100 acres of some of the most intact and high-functioning vernal pool habitat remaining in the state and that the site supports ten listed and/or special concern species and is representative of habitats that occurred widely across the Mather Core Recovery Area in the early 20th century.*

As noted in the DEIS, the Cordova Hills site contains approximately 89.11 acres of waters of the U.S., approximately 47.5 acres of which are vernal pools. In addition, the Pilatus property contains 20.72 acres of waters of the U.S., approximately 6.59 acres of which are vernal pools. As described on page 3.4-33 of the DEIS, the greatest concentration and highest quality vernal pool habitat on the site is located within the western plateau area. Under the Proposed Action, 31.87 acres of vernal pools would be preserved within the approximately 381-acre western plateau avoided area (see Exhibit 3.4-4 on page 3.4-35 of the DEIS). Under the Applicant's Preferred Alternative, as described in Chapter 2, "Modified Proposed Action," of the FEIS, 32.59 acres of vernal pools would be preserved within an approximately 384-acre western plateau avoided area. As discussed in detail on pages 3.4-2 through 3.4-22 of the DEIS, there are six special-status species, including three that are listed under the Endangered Species Act, known to occur on the Cordova Hills site. One additional bird species of special concern has been observed foraging on the site and may nest on the site. There are other special-status species that have moderate to high potential to reside on the Cordova Hills site, but they have not been documented to occur there. The western plateau, consisting of both the proposed impact area and proposed avoided area, contains the majority of known special-status species occurrences within the site. The western

plateau avoided area contains all of the known pools supporting Sacramento Orcutt grass and is designed to connect to other vernal pool preserves proposed to the west of the Cordova Hills site and would provide for a large, interconnected network of vernal pool habitat within the Mather Core Recovery Area. Additional vernal pool habitat would be preserved within the approximately 112-acre central drainage avoided area. Overall, approximately 68 percent of the existing vernal pool acreage on the Cordova Hills site would be preserved under the Proposed Action and an estimated 539 acres of the site would be preserved for continued wildlife use. As compensatory mitigation for the proposed loss of waters of the U.S., the applicant is proposing the following: (1) establish 14.79 acres of vernal pools at the Shehadeh property, (2) establish 1.78 acres of vernal pools at the Chester Drive property, (3) preserve 32.22 acres of vernal pools, 10.01 acres of seasonal wetlands, ponds, and ditches, and 12.65 acres of creek and intermittent drainage on the proposed project site, (4) purchase 7.12 vernal pool establishment credits from the Toad Hill Ranch Mitigation Bank; (5) purchase 4.90 floodplain riparian establishment credits from the Cosumnes Floodplain Mitigation Bank, and (6) purchase 24.66 floodplain mosaic establishment credits from the Cosumnes Floodplain Mitigation Bank. The Toad Hill Ranch Mitigation Bank is located in Placer County, and is outside of the 8-digit HUC watershed of the project site. The Cosumnes Floodplain Mitigation Bank is located within Sacramento County, and is within the 8-digit HUC watershed of the eastern portion of the project site, and outside of the 8-digit HUC watershed of the western portion of the project site. USACE has not made a determination on whether the proposed compensatory mitigation is sufficient to ensure no net loss of aquatic resource functions and services. A determination of the required compensatory mitigation to fully offset the loss of waters of the U.S. associated with the Applicant's Preferred Alternative will be made in the ROD, if a decision is made by USACE to issue a permit for the Applicant's Preferred Alternative.

USEPA-6

The comment states that the Cordova Hills proposal exists within the context of the proposed nearly completed South Sacramento County Habitat Conservation Plan (SSHCP), which was developed and conceived among a diversity of governmental, environmental, and other regulatory stakeholders with the goal of providing a framework for 50 years of development while addressing the considerable cumulative loss of vernal pools and listed species in the plan area. The comment goes on to state that the SSHCP provides a regional context for compensatory mitigation, and a monitoring and preserve management framework that is otherwise unavailable and without which, the scale of impacts proposed under the Proposed Action may no longer be sustainable given limited remaining mitigation opportunities.

Areas proposed for preservation of vernal pools and vernal pool species under the Proposed Action are consistent with the conceptual preserve design as shown in the working draft of the SSHCP at the time the DEIS was drafted (shown in Figure 7-1 of the July 2010 Draft SSHCP Conservation Strategy). Therefore, the Proposed Action does not conflict with the proposed SSHCP. The Applicant's Preferred Alternative, as described in Chapter 2, "Modified Proposed Action," of the FEIS, would preserve approximately 0.72 acres greater vernal pools than the Proposed Action identified in the DEIS. If the SSHCP is approved, and the project applicant proposes to become a participant, the applicant would need to coordinate with Sacramento County to determine if the Applicant's Preferred Alternative conflicts with the proposed SSHCP conceptual preserve design. The SSHCP has not yet been completed or adopted. Therefore, it

does not currently provide a reliable framework for regional conservation or any certainty to the regulated public.

USEPA-7 *The comment recommends that if the Cordova Hills project proceeds in advance of a viable regional conservation framework, the Final Environmental Impact Statement (FEIS) provide additional information demonstrating compliance with CWA Section 404(b)(1).*

See response to comment USEPA-2. This comment does not identify any substantial inconsistencies with a regional conservation framework.

USEPA-8 *The comment recommends that if the Cordova Hills project proceeds in advance of a viable regional conservation framework, the FEIS further describe the project's potential impacts from criteria air pollutants and greenhouse gases.*

Please refer to the responses to comments USEPA-27 through USEPA-48, which address the specific issues raised by EPA with respect to air quality and climate change impacts.

USEPA-9 *The comment states that USACE must determine that the project complies fully with Federal Guidelines for Specification of Disposal sites for Dredged or Fill Materials (40 Code of Federal Regulations [CFR] 230) pursuant to CWA Section 404(b)(1) and that the project applicant has not demonstrated that the Proposed Action complies with all of the restrictions to discharges under the Guidelines related to alternatives analysis, water quality, endangered species, significant degradation, and/or mitigation.*

USACE agrees with USEPA's comment that a permit cannot be issued unless USACE determines that the project complies with the Section 404(b)(1) Guidelines. The comment by USEPA that the applicant has not demonstrated that the Proposed Action complies with the CWA Section 404(b)(1) Guidelines is noted. The DEIS fully evaluates all impacts of the Proposed Action and other alternatives on the environment and provides the information for USACE to complete the factual determinations required by the CWA Section 404(b)(1) Guidelines, which will be made in the ROD. As noted in response to comment USEPA-2, USACE will not issue a permit for the Applicant's Preferred Alternative unless it is determined by USACE in the ROD that the alternative is not contrary to the public interest and complies with the CWA Section 404(b)(1) Guidelines. Also see responses to comments USEPA-10–USEPA-38 which address specific issues raised by EPA with respect to alternatives analysis, water quality, endangered species, significant degradation, and mitigation.

USEPA-10 *The comment states that EPA explained in a July 19, 2010 scoping meeting that it believes less damaging practicable alternatives exist elsewhere for Cordova Hills' development purposes and the applicant has not overcome the Section 404(b)(1) Guidelines' rebuttal presumption that this is so.*

See response to comment USEPA-2. It is not clear from the comment where these other alternative sites are located. As explained in Section 2.9.2 of the DEIS, a number of large, undeveloped tracts of land were identified within the Urban Services Boundary in eastern Sacramento County, and were determined to be unavailable, due to existing or proposed permit

applications. These sites consist of the Sunrise Douglas Community Plan Area, Rio del Oro, Folsom South of U.S. Highway 50 Specific Plan Area, Mather Specific Plan, Jackson Township Specific Plan, West Jackson Specific Plan, and SunCreek Specific Plan. The DEIS evaluated the North of Glory Lane Off-Site Alternative, which was considered but rejected, as this alternative would have greater impacts to waters of the U.S. than the Proposed Action. USACE will address compliance with the CWA Section 404(b)(1) Guidelines in the ROD.

USEPA-11 *The comment states that the Proposed Action is inappropriately aligned with the project applicant's very specific development objectives (8,000 units in six villages with a regional university) and that to practicably meet the project purposes, the project does not need to be the size the applicant has proposed.*

The Proposed Action in the DEIS consists of the action which the applicant proposed under the Department of the Army (DA) permit application that was submitted on March 16, 2011. USACE disagrees with the statement by EPA that it is inappropriate to align the Proposed Action with the project applicant's specific development objectives. As discussed on page 2-1 of the DEIS, the alternatives analyzed in the DEIS are based on the project purpose, alternatives screening criteria, coordination with other Federal agencies, Sacramento Metropolitan Air Quality Management District [SMAQMD], and Sacramento County). The alternatives also consider scoping comments received on the notice of intent (NOI) and voiced at the scoping meeting. These alternatives represent a reasonable range of alternatives to the project applicant's Proposed Action, consistent with NEPA requirements and 33 CFR Part 325 Appendix B. The Proposed Action and alternatives (with the exception of the No Action Alternative required by NEPA) have each been formulated to allow for the construction of a mixed-use development within the USB of eastern Sacramento County, while avoiding additional waters of the U.S. or avoiding or substantially lessening other significant adverse environmental effects and represent a range of development configurations. USACE continues to coordinate with the applicant on alternatives to the Proposed Action and Applicant's Preferred Alternative, and has not developed full screening criteria for the determination of the LEDPA. USACE will make a determination on the appropriate screening criteria to be utilized to determine practicability of an alternative (as defined by 40 CFR Section 230.10(a)(2)), as well as a determination for compliance with the CWA Section 404(b)(1) Guidelines in the ROD.

USEPA-12 *The comment states that Appendix C of the DEIS (Section 404[b][1] Alternatives Information) identifies an alternative not analyzed in the DEIS, the Modified Proposed Action Alternative, as practicable and less environmentally damaging than the Proposed Action and therefore this alternative should have been evaluated in the DEIS.*

The DEIS analyzes a reasonable range of alternatives to the Proposed Action, consistent with NEPA requirements, including alternatives that may be less environmentally damaging than the Proposed Action and that reduce effects on waters of the U.S. as much as or more than the Modified Proposed Action described in Appendix C of the DEIS. The Modified Proposed Action was developed after the DEIS analysis was substantially completed. However, as described in Chapter 2, "Modified Proposed Action," of this FEIS, the Modified Proposed Action is the Applicant's Preferred Alternative in the FEIS. Please refer to Chapter 2, "Modified Proposed

Action,” for additional discussion of this alternative, and the applicability of the analysis provided in the DEIS. The Applicant’s Preferred Alternative would have fewer adverse environmental impacts than the Proposed Action evaluated in the DEIS, and therefore would fall within the reasonable range of alternatives evaluated in the DEIS. Additionally, it does not increase the intensity or severity of impacts evaluated in the DEIS. The DEIS analyzed alternatives with impacts ranging from 9.38 acres of jurisdictional waters of the U.S. to 39.79 acres (See Chapters 2 and 3). The scope and impacts of the Applicant’s Preferred Alternative fall within the scope and level of impact represented by the various DEIS alternatives. On that basis, USACE has determined that the Applicant’s Preferred Alternative does not result in substantial changes in the Proposed Action that are relevant to environmental concerns and does not result in new significant circumstances or information relevant to environmental concerns and bearing on the Proposed Action or its impacts, and therefore a supplemental DEIS is not necessary. Chapter 2 of this FEIS (Section 2.4) provides a qualitative summary of the impacts of the Applicant’s Preferred Alternative.

USEPA-13 *The comment states that EPA disagrees with the practice of comparing the costs of each alternative to the Proposed Action and that the proper cost comparison under the regulations is to a typical project of similar purposes in the market area.*

The alternatives information provided in Appendix C of the DEIS was prepared and submitted by the project applicant to provide information on the practicability of various alternatives within the proposed Cordova Hills site. This information was provided as part of the DEIS to allow the public to review the information submitted by the applicant and provide comments for USACE to utilize when making a permit decision. This alternatives information was neither prepared nor approved by USACE. USACE has been coordinating with the applicant and has provided the applicant with comments on the alternatives information. Although USACE may use information within the alternatives information submitted by the applicant, the CWA Section 404(b)(1) alternatives analysis will be prepared by USACE within the ROD. USACE will consider and evaluate any comments made by EPA, other Federal, State, or local agencies, or members of the public regarding the alternatives information provided by the applicant and located in Appendix C of the DEIS. In developing the CWA Section 404(b)(1) alternatives analysis in the ROD, USACE will use all existing regulations and guidance available. Please refer to responses to comments USEPA-1, USEPA-2, USEPA-9, and USEPA-16 through USEPA-18.

USEPA-14 *The comment states that EPA takes issue with combining the university with the mixed-use commercial/residential development as they believe they have different purposes and should be analyzed separately.*

EPA offered a more detailed version of this comment in its February 18, 2015 letter. Please refer to the responses to comments USEPA_2-6 through USEPA_2-8.

USEPA-15 *The comment states that the Proposed Action does not appear to be the LEDPA for the reasons stated in the previous comments and because the Modified Proposed Action has been identified as practicable and having fewer impacts.*

See response to comments USEPA-2 and USEPA-12.

USEPA-16 *The comment states that the EIS should present the impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing decision makers and the public with a clear basis for choice among options. The comment states further that EPA does not believe the DEIS provides sufficient information to demonstrate that the Proposed Action is the LEDPA in compliance with the Guidelines.*

The Council on Environmental Quality (CEQ) NEPA regulations (40 CFR 15012.14) require that an EIS devote substantial treatment to each alternative considered in detail including the Proposed Action so that reviewers may evaluate their comparative merits. The DEIS provides a full comparison of each alternative to the Proposed Action, including tables that provide side-by-side comparisons of acreage of impacts on waters of the U.S., and analyzes each alternative at an equal level of detail. The comment provides no evidence or reasoning to conclude that the analysis provided in the DEIS is inadequate under NEPA or inconsistent with CWA Section 404(b)(1). See response to comment USEPA-2 regarding identification of the LEDPA.

USEPA-17 *The comment recommends the FEIS fully analyze one or more alternatives that comply with the Guidelines, document how the alternatives comply with the Guidelines, and fully analyze the Modified Proposed Action Alternative.*

See response to comment USEPA-2. USACE will consider the practicability of the Applicant's Preferred Alternative and its compliance with the CWA Section 404(b)(1) Guidelines in the CWA Section 404(b)(1) alternatives analysis prepared in the ROD. EPA has been provided the opportunity to review and comment on alternatives information submitted by the applicant, and USACE will continue to provide EPA with the opportunity to review and comment on the alternatives information, to assist USACE in making a final permit decision for the Applicant's Preferred Alternative.

USEPA-18 *The comment recommends the FEIS identify the Corps' Preferred Alternative, the Environmentally Preferable Alternative, and the LEDPA and explain the bases for these designations.*

The NEPA regulations at 40 CFR Part 1502.14(e) state that in the Alternatives Section of an EIS, the agency shall "Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference." As stated on page 2-2, of Chapter 2, "Description of the Proposed Action and Alternatives" in the DEIS, in accordance with USACE NEPA implementing regulations at 33 CFR Part 325, Appendix B(9)(b)(5), USACE is neither a proponent nor an opponent of the project applicant's proposal, therefore the project applicant's final proposal will be identified as the "Applicant's Preferred Alternative" in the final EIS. As such, USACE does not identify an agency-preferred alternative in the FEIS, but does identify the alternative or alternatives which were considered to be environmentally preferable in the ROD.

USEPA-19 *The comment recommends the FEIS rectify the existing discrepancies between the DEIS and Appendix C and include a completed CWA Section 404(b)(1) alternatives analysis.*

While consideration of the CWA Section 404(b)(1) Guidelines was given in the preparation of the EIS, including ensuring that the information necessary to make all factual determinations is provided in the DEIS, at the time the DEIS was published, USACE had not received sufficient information to eliminate any of the alternatives analyzed in the DEIS from further consideration. The EIS is not intended to make a determination on compliance with the CWA Section 404(b)(1) Guidelines, but to provide sufficient information for USACE to determine compliance with the CWA Section 404(b)(1) Guidelines in the ROD. See also response to comment USEPA-12.

USEPA-20 *The comment states that EPA remains concerned that the project's impacts to intermittent drainages and Carson Creek could adversely affect Laguna Creek and the Cosumnes River, which is listed on the 303(d) list as impaired for bacteria, invasive species, and sediment; and that projects of this magnitude can exacerbate downstream water quality issues. The comment further states that it remains to be determined whether the proposed project could cause or contribute to violations of state water quality standards as the Central Valley Regional Water Quality Control Board (RWQCB) has yet to evaluate a CWA Section 401 water quality certification.*

As described on page 3.4-46, impacts to downstream waters would be minimized through the use of Low Impact Development principles and other design features. Potential project effects on water quality are fully analyzed under Impact 3.10-1 beginning on page 3.10-24 of the DEIS. As described on page 3.10-25, Best Management Practices (BMPs) would be implemented during construction and Mitigation Measure 3.10-1 requires preparation and implementation of a Storm Water Pollution Prevention Plan and Associated BMPs. Mitigation Measure 3.4-1b (page 3.4-40) requires incorporation of measures from the Cordova Hills Drainage Master Plan to avoid and minimize erosion and runoff into Laguna Creek, Deer Creek, Carson Creek, their tributaries, and all wetlands to remain on-site. Implementing these measures would reduce potential project effects on downstream hydrology and water quality to a less than significant level. No permit will be issued unless it is determined by USACE in the ROD that the project is not contrary to the public interest and is in compliance with the CWA Section 404(b)(1) Guidelines. In accordance with the CWA Section 404(b)(1) Guidelines, no discharge of dredged or fill material shall be permitted if it causes or contributes, after consideration of disposal dilution and dispersion, to violations of any applicable State water quality standard or violates any applicable toxic effluent standard or prohibition under Section 307 of the CWA.

USEPA-21 *The comment states that it remains to be determined if the project would jeopardize the continued existence of or critical habitat for several threatened or endangered species as the U.S. Fish and Wildlife Service (USFWS) has yet to produce a Biological Opinion on this project. The comment further states that the Biological Opinion is critical to the determination of compliance with the 404(b)(1) Guidelines 230.10(b).*

The Cordova Hills site is not within an area designated as critical habitat for any threatened or endangered species. The DEIS provides a comprehensive evaluation of each of the action alternative's potential effects on threatened and endangered species on pages 3.4-53 through 3.4-66. The DEIS proposes relevant and reasonable measures to reduce the project's potential adverse effects on Federally listed species (Mitigation Measures 3.10-1, 3.4-1a, 3.4-1b, 3.4-2a,

3.4-2b, 3.4-2c, and 3.4-2d) and discloses that direct and indirect effects to Federally listed vernal pool branchiopods are potentially significant even with implementation of these mitigation measures (pages 3.4-69 and 70). Consultation with USFWS under Section 7 of the Endangered Species Act is ongoing for the Cordova Hills project and must be completed before USACE can issue a CWA Section 404 permit for the project. The Biological Opinion that will be prepared by USFWS will include terms and conditions that implement reasonable and prudent measures that will minimize the risk of take of listed species. The project's requirements with regards to Federally listed species will be determined through issuance of the Biological Opinion by the USFWS and any specific requirements stated in that Biological Opinion will have to be fulfilled by the project applicant. As noted in response to comment USEPA-2, the EIS is not intended to make a determination on compliance with the CWA Section 404(b)(1) Guidelines, but to provide sufficient information for USACE to determine compliance with the CWA Section 404(b)(1) Guidelines in the ROD. USACE agrees with EPA's comment that the Biological Opinion is critical to the determination of compliance with the CWA Section 404(b)(1) Guidelines, as no discharge of dredged or fill material shall be permitted if it jeopardizes the continued existence of species listed as endangered or threatened under the Federal Endangered Species Act.

USEPA-22 *The comment recommends the FEIS demonstrate how the project will ensure existing water quality standards.*

See response to comment USEPA-20.

USEPA-23 *The comment recommends the FEIS analyze the project in a regional watershed planning context with respect to its potential take of listed species (possibly as a component of a Habitat Conservation Plan).*

Project effects on listed species are analyzed in a regional context in the DEIS taking into account the Vernal Pool Recovery Plan (USFWS 2005) and emphasizing the importance of mitigating project effects within the Mather Core Area and within the affected watershed, as discussed in the conceptual wetland mitigation plan (Appendix N of the DEIS) and on pages 3.4-39 and 40, 3.4-64, 3.4-68 and 69. The geographic area considered for cumulative impacts is the Mather Core Area and watersheds in which the Cordova Hills and Pilatus sites are located, as described in Table 3.0-1 of the DEIS. There is currently no adopted Habitat Conservation Plan for the region. (See also response to comment USEPA-6.)

USEPA-24 *The comment recommends that if the FEIS proceeds separately from a Habitat Conservation Plan, it discuss the project's consistency with the mitigation requirements of the SunRidge Record of Decision (ROD).*

There is currently no adopted Habitat Conservation Plan for the region and USACE does not have the authority to require that project applicants wait for adoption of a Habitat Conservation Plan. USACE is required to review and make a permit decision on any application submitted. A ROD was issued for the EIS for the Sunridge Specific Plan by USACE on January 25, 2011. Finding e of this ROD states the following:

The Corps recognizes the significant cumulative loss of vernal pool wetlands within the Mather Core Recovery Area. For future unavoidable impacts to vernal pool wetlands within the Mather Core Recovery Area, including those associated with the Arista del Sol project, compensatory mitigation shall be:

- 1) based on a method for assessing the functions of all waters of the U.S. on the project site;
- 2) accomplished at a ratio of greater than 1:1, after considering direct and indirect impacts, temporal loss and difficulties creating vernal pool wetlands; and
- 3) located in the Mather Core Recovery Area, unless determined impracticable or inappropriate by the Corps

USACE has been coordinating with the applicant regarding compensatory mitigation requirements for the loss of waters of the U.S. associated with the Applicant's Preferred Alternative, and in identifying compensatory mitigation options available for the loss of vernal pools in the Mather Core Recovery Area. As a result of this coordination, the applicant has submitted a wetland mitigation proposal, which is available for review and comment in Appendix A of this FEIS. The applicant is proposing to compensate for the loss of 14.35 acres of vernal pools in the Mather Core Recovery Area through the establishment and re-establishment of 16.57 acres of vernal pools at the Shehadeh Property and Chester Drive Property, located in the Mather Core Recovery Area, on-site preservation of 32.217 acres of vernal pools (27.73 acres considered as listed vernal pool branchiopod habitat) within the Mather Core Recovery Area, off-site preservation of 8.6 acres of vernal pools at the Shehadeh Property, and off-site preservation of 13.35 acres of vernal pools at the Chester Drive Property, and 1.78 acres at the Gill Ranch Conservation Bank (outside of the MCA). Therefore, the applicant is proposing a total of 51.46 acres of listed vernal pool branchiopod habitat preservation of which 49.68 acres (97 percent) is within the Mather Core Recovery Area. The decision regarding the amount and type of compensatory mitigation required to ensure no net loss of waters of the U.S. associated with the Applicant's Preferred Alternative will be made by USACE in the ROD.

USEPA-25 *The comment requests that the FEIS include the rationale for endangered species compliance for this permit action.*

See response to comment USEPA-21.

USEPA-26 *The comment states that Section 230.10(c) prohibits discharges that will cause or contribute to significant degradation of waters of the U.S., that vernal pool wetlands in general, but in south Sacramento County in particular, have been significantly degraded historically and the Cordova Hills project lacks appropriate mitigation to ensure it does not further contribute to this degradation.*

See response to comment USEPA-1. USACE agrees with the statement made by EPA that the CWA Section 404(b)(1) Guidelines prohibit discharges that will cause or contribute to significant degradation of waters of the U.S. As stated in USEPA-24, the ROD for the Sunridge Specific Plan acknowledges a significant cumulative loss of vernal pools in the Mather Core Recovery

Area. USACE will issue a permit for the Applicant's Preferred Alternative only if it is determined that the project is not contrary to the public interest and complies with the CWA Section 404(b)(1) Guidelines. The determination of significant degradation will take into account any required compensatory mitigation.

USEPA-27 *The comment states that according to recent studies, California's vernal pools continue to sustain an unacceptable level of destruction and that several reasonably foreseeable projects in the vicinity of Cordova Hills are seeking CWA Section 404 permits for a combined total of approximately 330 acres of fill of waters of the United States (DEIS Table 3.0-2. The comment adds that considering the large number of projects in the Sacramento County area that have already been constructed, the unmitigated losses due to agricultural conversions, and the reasonable foreseeable additional impacts of future projects, the Cordova Hills project would exacerbate the ongoing significant degradation of vernal pool resources in southern Sacramento County.*

The commenter's statements are correct regarding reasonably foreseeable cumulative losses of waters of the U.S., which are reflected in the DEIS analysis of cumulative impacts on biological resources, pages 3.4-87 and 88. As identified in USEPA-26, no permit will be issued if USACE determines that it would cause or contribute to significant degradation of waters of the U.S., which will take into account the amount, location, and type of compensatory mitigation required. No change to the DEIS is proposed in response to this comment.

USEPA-28 *The comment states that the diversity of the Cordova Hills site and Pilatus site is known to be outstanding based on the presence of numerous rare or endangered species and the extent of vernal pool complexes, named and unnamed drainage, seasonal wetlands, and other waters of the United States, including over 100 acres of some of the most intact and high-functioning vernal pools remaining in the state. The comment recommends that the FEIS demonstrate that this project would not contribute to significant degradation of the aquatic ecosystem in accordance with the Guidelines.*

See response to comments USEPA-1, USEPA-5, and USEPA-27. The DEIS acknowledges that the Cordova Hills site contains a variety of high quality waters of the U.S., including wetlands, particularly in the western plateau area of the site. The comment provides no evidence or reasoning to conclude that the analysis provided in the DEIS is inadequate under NEPA or inconsistent with CWA Section 404(b)(1).

USEPA-29 *The comment states that Section 230.10(d) prohibits discharges unless all appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem. The comment further states that the Proposed Action would result in habitat fragmentation and edge effects that are known to add environmental stressors on existing habitats because the avoided areas are broken into 12 separate parcels.*

USACE agrees with EPA's comment that the CWA Section 404(b)(1) Guidelines prohibit discharges unless all appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem. The Applicant's Preferred Alternative

includes establishing habitat preserves within large avoided areas designed to minimize edge effects and provide connectivity to other open habitat areas on and off the project site. Alternatives are included in the DEIS that further reduce edge effects by providing larger avoided areas. Some of the avoided areas are linear because they are designed for the preservation of drainage channels. Smaller avoided areas on the perimeter of the Cordova Hills site would connect to open areas outside of the project boundaries. The hydrologic connectivity, geology, rare plant surveys, CRAM, and the vernal pool branchiopod surveys indicated that the highest quality waters of the U.S. within the Cordova Hills site occur in the western plateau area, and that the waters of the U.S. east of the plateau area are different from the habitats located in the western plateau area. The waters of the U.S. located east of the western plateau area consist primarily of seasonal wetland swales and intermittent and ephemeral drainages that function primarily for water transport, and provide lower quality habitat for threatened and/or endangered or special status species than those waters of the U.S. located on the western plateau area. Numerous design features have been incorporated to reduce edge effects and other indirect effects of fragmentation as described on pages 3.4-33 through 3.4-38 of the DEIS. However, as identified in the DEIS, the proposed action would have potentially significant direct and indirect effects to existing habitat. USACE continues to coordinate with the applicant to ensure that impacts to waters of the U.S. are avoided and minimized to the maximum extent practicable. No discharge will be permitted unless USACE determines in the ROD that all appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic environment and that the discharge complies with all other requirements of the CWA Section 404(b)(1) Guidelines.

USEPA-30 *The comment states that many organisms move in and out of wetlands or are known to respond negatively to human encroachment. As an example the comment states that western spadefoot is negatively phototaxic and will stop breeding in response to light pollution.*

USACE agrees with USEPA's comments that human encroachment can have an indirect adverse effect to plant and animal species. Chapter 3.4, "Biological Resources," of the DEIS identifies the potential indirect adverse effects of the Proposed Action and other alternatives. The highest quality habitat for western spadefoot on the Cordova Hills site is within the western plateau area, the majority of which would be preserved under the Applicant's Preferred Alternative. Although loss of suitable habitat for western spadefoot would occur, the design of the western plateau avoided area would allow this species to continue to breed on the Cordova Hills site. The Cordova Hills Special Planning Area Master Plan also prohibits lighting in the preserve, and prohibits adjacent lighting from encroaching upon the preserve. The comment does not raise a specific question or provide specific information regarding the adequacy of the environmental analysis provided in the DEIS.

USEPA-31 *The comment states that the proposed compensatory mitigation actions would result in a net loss of waters of the U.S. and are, therefore, insufficient under existing South Pacific Division Procedures and the 2008 compensatory mitigation rule.*

The proposed compensatory mitigation plan located in Appendix N of the DEIS was provided by the project applicant. Since publishing of the DEIS, the project applicant has revised the proposed compensatory mitigation plan, which is located in Appendix A. USACE requires compensatory

mitigation for losses of the U.S. that are specifically identifiable, reasonably likely to occur, and of importance to the human or aquatic environment, and to ensure that a project complies with the CWA Section 404(b)(1) Guidelines. USACE has not determined if the proposed compensatory mitigation is sufficient to compensate for the loss of waters of the U.S. associated with the Applicant's Preferred Alternative, and will make that determination in the ROD. Mitigation Measure 3.4-1a (page 3.4-39 of the DEIS) requires the project applicant to submit a compensatory mitigation plan to USACE and the Central Valley RWQCB, for review and approval prior to USACE making a permit decision for the Applicant's Preferred Alternative. The compensatory mitigation plan shall identify the amount and type of proposed compensatory mitigation to ensure "no-net-loss" of aquatic resource functions and services that would be removed, lost, and/or substantially degraded as a result of implementing the project. USACE will make a final decision on the amount and type of required compensatory mitigation in the ROD. If it is determined that there is not sufficient compensatory mitigation to offset the losses of waters of the U.S., or to ensure that the Applicant's Preferred Alternative will not cause or contribute to significant degradation of waters of the U.S., a permit will not be issued. Therefore, the proposed mitigation measures are consistent with South Pacific Division Procedures and the 2008 compensatory mitigation rule.

USEPA-32 *The comment states that the proposed on- and off-site mitigation locations are small, involve creating vernal pools at unnaturally high densities, and would result in additional habitat fragmentation.*

Use of the off-site mitigation properties proposed in the project applicant's conceptual wetland mitigation plan (Appendix N of the DEIS) include preservation, establishment, and reestablishment of wetland habitats that connect to other preserve areas, such as the Bryte Ranch Conservation Bank. Therefore, the proposed off-site mitigation would not result in habitat fragmentation on its own. Permittee-responsible mitigation is currently the primary source of mitigation proposed due to cumulative impacts associated with development in the Mather Core Recovery Area and associated watersheds, and a lack of available agency-approved mitigation banks within the Mather Core Recovery Area. USACE has not yet made a determination regarding the amount, type and location of required compensatory mitigation, and will evaluate the applicants wetland mitigation proposal located in Appendix A, as well as the applicants Draft Mitigation and Monitoring Plan and Long-Term Management Plans (which have not yet been submitted to USACE) to ensure compliance with USACE requirements at 33 CFR 332. This will include an evaluation of the proposed compensatory mitigation location, proposed amount of compensatory mitigation, and additional environmental effects that may occur. USACE will make a determination on the compensatory mitigation requirements in the ROD.

USEPA-33 *The comment states that the proposed compensatory mitigation plan relies on preserved waters of the U.S., which can only occur if all five substantive requirements are met (40 CFR 230.93(h) i-v) and states that the DEIS does not disclose whether all of the criteria for preservation have been met.*

USACE agrees with EPA's comments that preservation may only be used to provide compensatory mitigation for activities authorized by DA permit when the five criteria of 33 CFR

332.3(h)(1) and 40 CFR 230.93(h)(i-v) are met. See response to comments USEPA-1, USEPA-2, USEPA-9, USEPA-10, USEPA-12, USEPA-21, USEPA-24, USEPA-26, USEPA-29, USEPA-31, and USEPA-32. USACE will issue a permit for the Applicant's Preferred Alternative only if it is determined in the ROD that the project would not be contrary to the public interest and would comply with the CWA Section 404(b)(1) Guidelines, which includes a determination that all appropriate and practicable steps have been taken to minimize adverse effects.

USEPA-34 *The comment expresses concern that there will be few credits available for the proposed preserved waters on the Cordova Hills project site and the three off-site locations.*

The commenter is correct that there is a lack of agency-approved mitigation bank credits available in the project area and this is reflected in the DEIS analysis. No change to the DEIS is proposed in response to this comment. A combination of compensatory mitigation including purchase of credits and permittee-responsible mitigation at off-site properties is currently proposed by the applicant, but permittee-responsible mitigation is currently the primary source of mitigation proposed. See response to comments USEPA-24 and USEPA-32.

USEPA-35 *The comment recommends that the FEIS document availability of mitigation for this project and include a revised mitigation plan that shows compliance with the South Pacific Division's recently published mitigation guidelines.*

The project applicant's conceptual wetland mitigation plan (Appendix N of the DEIS) provides a discussion of available mitigation. A revised wetland mitigation proposal, prepared by the applicant, is being released for public review simultaneously with the FEIS as Appendix A. As noted previously, there is a lack of agency-approved mitigation bank credits available in the project area and this is reflected in the DEIS analysis. USACE cannot issue a permit unless it determines the project complies fully with the CWA Section 404(b)(1) Guidelines and the compensatory mitigation requirements of 33 CFR 332. See response to comment USEPA-24.

USEPA-36 *The comment recommends that the FEIS include documentation of the project's ability to fully offset the loss of nearly 40 acres of outstanding vernal pool, seasonal wetland, and stream habitat.*

See response to comments USEPA-1, USEPA-2, USEPA-24, and USEPA-31 through USEPA-35.

USEPA-37 *The comment states that the distinction between direct and indirect emissions is unclear in Table 3.3-6.*

As shown in Chapter 4, "Errata," a note has been added to Table 3.3-6 in response to this comment. This note states that emissions are direct and indirect, but all subject to the General Conformity *de minimis* thresholds.

USEPA-38 *(Page 3.3-22) The comment notes that the analysis incorrectly states that General Conformity only applies to direct emissions. Rather, the General Conformity rule at 40 CFR Section 93.153(b), however, applies to "the total of direct and indirect emissions in a nonattainment or*

maintenance area caused by a Federal action.” Therefore, all construction activities are subject to the conformity rule.

As shown in Chapter 4, “Errata,” the referenced text has been changed in response to this comment. The analysis evaluates total construction emissions (i.e., direct and indirect emissions) of all pollutants against the applicable de minimis thresholds.

USEPA-39 *The comment recommends that direct and indirect emissions be clarified in Table 3.3-6 and that both types of emissions are used to compare with the conformity rule de minimis thresholds.*

See response to Comment USEPA-37. As shown in Chapter 4, “Errata,” clarifying text has been added to Table 3.3-6 in response to this comment. The analysis evaluates total construction emissions (i.e., direct and indirect emissions) of all pollutants against the applicable de minimis thresholds.

USEPA-40 *The comment states concern for potential cumulative impacts in the Sacramento Valley Air Basin. Comment states that inclusion of cumulative air quality projects in the region would help clarify the intensity of cumulative impacts.*

The DEIS used SMAQMD’s methodologies for evaluating cumulative air quality impacts of development projects to evaluate the proposed project. SMAQMD does not recommend evaluating cumulative impacts by listing all projects that could generate air quality emissions in the region. Rather, the cumulative analysis evaluates the proposed project’s contribution to regional emissions through application of SMAQMD’s established thresholds, and determines whether that contribution would be cumulatively considerable. In addition, the SVAB is a very large area that includes Butte County, Colusa County, Glenn County, Sacramento County, Shasta County, Sutter County, Tehama County, Yolo County, Yuba County, the western portion of Placer County, and the eastern portion of Solano County. With the size of the SVAB air quality impacts for all projects in the area is not known and cannot be reasonably obtained. As identified in Section 3.3, “Air Quality,” of the DEIS, the cumulative air quality impacts of the Proposed Action, when combined with other past, present, and reasonably foreseeable future projects is significant. A list of cumulative projects was provided in Section 3.0.4, “Cumulative Context,” of the DEIS, although the specific air quality impacts of those projects was not provided. While it may be possible to obtain the air quality impacts of large projects in which USACE has prepared or is preparing an EIS, the time and resources that would be required to compile this data is substantial and would not result in any changes to the analysis or conclusions in the DEIS, and because this would not include those projects that do not require an EIS, obtaining this information would not provide all air quality impacts in the basin. The comment provided by EPA does not indicate how the inclusion of the specific air quality impacts of each of these projects would change the analysis or conclusions in the EIS. No change to the text of the DEIS is proposed in response to this comment.

USEPA-41 *The comment notes that a list of cumulative projects was included in other DEISs such as Placer Vineyards and Westbrook.*

Please see Response USEPA-40. The method identified in the comment is not recommended by SMAQMD or other major air districts in California (e.g., Bay Area Air Quality Management District, San Joaquin Valley Air Pollution Control District, South Coast Air Quality Management District). No change to the text of the DEIS is proposed in response to this comment.

USEPA-42 *The comment recommends the analysis add a list of applicable reasonably foreseeable future projects and their associated emissions.*

See response for Comment USEPA-40 and USEPA-41. No change to the text of the DEIS is proposed in response to this comment.

USEPA-43 *The comment states that even with implementation of Final Environmental Impact Report Mitigation Measure CC-1, per capita transportation emissions would exceed the Sacramento Climate Action Plan's April 2011 threshold of significance.*

The commenter's statement is correct and is reflected in the DEIS analysis. No change to the DEIS is proposed in response to this comment.

USEPA-44 *The comment states that the proposed project may not be consistent with the Metropolitan Transportation Plan/Sustainable Communities Plan (MTP/SCS) for the region. The comment identifies that the DEIS states that the Sacramento Area Council of Governments (SACOG) determined the project would make the region's ability to achieve 2035 greenhouse gas (GHG) emission reduction targets pursuant to Senate Bill (SB) 375 challenging under the "without university" scenario.*

USACE agrees that EPA accurately represents the language of the DEIS regarding the SACOG comments regarding the 2035 GHG emission reduction targets. The DEIS discloses information in Section 3.5, Page 3.5-20 of the DEIS, about the region's ability to achieve the 2035 GHG emission reduction targets pursuant to SB 375, as described by the commenter. No change to the DEIS is proposed in response to this comment.

USEPA-45 *The comment states that SACOG determined that the proposed project would generate higher transportation-related GHG emissions relative to other development opportunities in the region, and that these emissions would be significantly greater without the university.*

The DEIS discloses the referenced information about relative transportation-related GHG emissions, as described by the commenter. As noted on page 3.5-20, transportation-related emissions account for approximately 69 percent of the development-related emissions (see also Table 3.5-2 of the DEIS on page 3.5-14). See also page 3.5-20 of the DEIS, which discloses SACOG's determination that a 2035 GHG emissions reduction target could be challenging to meet under the "without university" scenario. No change to the DEIS is proposed in response to this comment.

USEPA-46 *The comment states that SACOG indicated, with or without the university, Cordova Hills will face a challenge being included in the next MTP/SCS based on market feasibility, and may*

require some additional efficiencies elsewhere in the region's land use and transportation system to achieve the regional goals.

The DEIS discloses the referenced information concerning the future MTP/SCS, as described by the commenter. This is in reference to a letter drafted by SACOG's former Executive Officer in 2012. In this letter to the Sacramento County Board of Supervisors, SACOG's former Executive Officer discusses scenarios related to a future MTP/SCS, including the opinion that Cordova Hills will face challenges being included in the next MTP/SCS based on market feasibility, and that if Cordova Hills is included in the next MTP/SCS, changes to the land use and transportation system elsewhere would be necessary to reduce emissions (McKeever, pers. comm.2012). No change to the DEIS is proposed in response to this comment.

USEPA-47 *The comment states concern over the feasibility of the university component of the Cordova Hills project. In addition, the comment states that the DEIS air quality and GHG emissions analysis underestimates emissions that would occur in the absence of the university component.*

The DEIS analyzes the project as proposed. The proposed University has been evaluated in all alternatives as a component of a large-scale, mixed-use development, as has commercial, residential, and other public uses. Please refer to the response to Comment SMAQMD-6 and the associated text revisions in Chapter 4, "Errata," which describe the measures identified by SMAQMD to require emission reductions in the event that the university component of the project were not constructed. No further changes to the text of the DEIS are proposed in response to this comment.

USEPA-48 *The comment recommends the FEIS provide an estimate of operational emissions "without university" for all alternatives, and that a discussion of the implications of the project not being included in the MTP/SCS also be included.*

Please refer to the responses to Comments USEPA-14, USEPA-44, USEPA-46, USEPA-47 and SMAQMD-6. No further changes to the text of the DEIS are proposed in response to this comment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION IX
 75 Hawthorne Street
 San Francisco, CA 94105-3901

USEPA_2

OFFICE OF THE
 REGIONAL ADMINISTRATOR

FEB 19 2015

Colonel Michael Farrell
 District Engineer
 U.S. Army Corps of Engineers, Sacramento District
 1325 J Street, 14th floor
 Sacramento, California 95814-2922

Subject: Public Notice SPK-2004-00116 for the proposed Cordova Hills Project, Sacramento County, California

Dear Colonel Farrell:

On January 28, 2015, the U.S. Environmental Protection Agency (EPA) provided comments in response to the Corps of Engineers, Sacramento District's (Corps) Public Notice for a Clean Water Act (CWA) Section 404 permit for the proposed Cordova Hills Project (enclosed). That letter identified the permit as a candidate for our headquarters' review pursuant to our agencies' Memorandum of Agreement (MOA) implementing CWA Section 404(q).

USEPA_2-1

Consistent with the MOA, and because there has been no change in the project proposal since our letter, I am writing to respectfully maintain our objections on the basis that permit approval as proposed will have substantial and unacceptable impacts to "aquatic resources of national importance." Vernal pool wetlands are habitat for species found nowhere else, and exist today at 15% of their historical abundance in California. The vernal pool complexes of southeast Sacramento County, and of this site in particular, are widely recognized as some of the best vernal pool habitat that remains.

As reflected in the 2011 Record of Decision prepared by your office for the nearby SunRidge project, impacts to these exceptionally high quality and increasingly rare aquatic resources have reached a critical point. Specifically, the Corps has determined that unavoidable permitted impacts to vernal pool wetlands within the U.S. Fish and Wildlife Service's "Mather Core Recovery Area" (MCRA), such as those resulting from the Cordova Hills proposal, must be mitigated within the MCRA. Moreover, cumulative losses in the MCRA since that time have made the available inventory of mitigation lands even scarcer. Absent a coordinated regional approach to the conservation of what remains, individual project authorizations that continue to chip away at these wetlands are increasingly difficult to approve under the protections established by the CWA.

USEPA_2-2

Further, the Cordova Hills proposal as a stand-alone project has not demonstrated compliance with the 404(b)(1) Guidelines, particularly the requirement that the proposed discharges represent the least environmentally damaging practicable alternative (LEDPA) and do not cause or contribute to the

USEPA_2-3

“significant degradation” of the aquatic ecosystem. Please see our attached detailed comments on these issues.

Thank you for your ongoing partnership implementing the programs of the CWA. Please call me at (415) 947-8702 with any questions, or have your Regulatory Division Chief contact Jason Brush, our Wetlands Section Supervisor, at (415) 972-3483.

Sincerely,



Jared Blumenfeld

USEPA_2-3

cont.

Enclosure:

Detailed comments
EPA Letter Dated January 28, 2015

cc: Jennifer Norris, U.S Fish and Wildlife Service, Sacramento Office
Elizabeth Lee, Central Valley Regional Water Quality Control Board
Tina Bartlett, California Department of Fish and Game, South Coast Region
Brad Hudson, County Executive, Sacramento County

U.S. EPA DETAILED COMMENTS ON THE CWA 404 APPLICATION FOR CORDOVA HILLS, SACRAMENTO COUNTY, CA, FEBRUARY 2015

Clean Water Act (CWA) Compliance

Since our January 28, 2015 letter, no additional information has been presented to EPA regarding the various shortfalls of the Cordova Hills proposal with regard to compliance with the 404(b)(1) Guidelines (“Guidelines” at 40 CFR 230). Those comments therefore remain applicable to the Corps permit decision, and we offer the following additional considerations.

USEPA_2-4

According to the alternatives analysis in Appendix C of the Draft Environmental Impact Statement (DEIS), “the ‘basic’ project purpose is to develop residential and commercial land uses.” According to the Public Notice, the overall project purpose is “to construct a large-scale, master-planned, mixed-use development, with associated infrastructure, within the Urban Services Boundary in southeastern Sacramento County.” As we stated in our previous letter, we believe the project purpose statements have been inappropriately crafted and interpreted to limit alternatives to the applicant’s site-specific proposal. We encourage the Sacramento District to reconsider these important issues in its 404(b)(1) analysis and findings for Cordova Hills, with particular reference to the well-established policy outcomes of three separate 404(q) elevation decisions.

USEPA_2-5

The Hartz Mountain CWA 404(q) elevation decision emphasized the District’s responsibility to independently: 1) “determine the minimum feasible size, circumstances, etc., which characterize a viable large scale, high density housing project;” and 2) develop an alternatives analysis that is “objective and balanced, and not used to provide a rationalization for the applicant’s preferred result (i.e., that no practicable alternative exists).” The Corps’ proposed action in the DEIS appears to have uncritically accepted the precise size and location of development for which the applicant has gained local entitlements, despite its isolation from other development and very high impacts to waters of the United States.

USEPA_2-6

Similarly, in the Old Cutler Bay CWA 404(q) elevation decision, Corps Headquarters determined that the District had “defined a project purpose that is too specific to the applicant’s proposal. . . . The project purpose statement must be defined so that an applicant is not in the position to direct, or attempt to direct, or appear to direct, the outcome of the Corps evaluation required under the 404(b)(1) Guidelines.” The cursory consideration of alternative project locations for Cordova Hills does not conform to the position that Corps’ Headquarters warned against in Old Cutler Bay.

USEPA_2-7

Finally, in the Twisted Oaks CWA 404(q) elevation decision, Corps Headquarters reiterated the basic point of Old Cutler Bay, and concluded that the District’s analysis, particularly with regard to independently evaluating the need for certain project features, was inadequate. For Cordova Hills, the inclusion of functionally independent elements such as general housing, a regional university, and commercial development as one “project purpose” has inappropriately limited the consideration of alternatives that may involve fewer, or no, impacts to waters of the United States. We recommend Sacramento District assess the impacts associated with each of these features, with particular attention to the regional demand for the proposed university campus. The EPA is aware of at least four university campuses under consideration within approximately 20 miles of the Cordova Hills site.

USEPA_2-8

As discussed in our prior letter, we also believe costs—which are an appropriate consideration under the Guidelines—have been inappropriately framed for Cordova Hills by comparing alternatives to the applicant’s preferred action. The proper cost comparison is to a generic or “average” project of the same purpose in the market area. To dismiss an alternative on costs, it is not sufficient that the alternative be

USEPA_2-9

more expensive; it must be impracticably so. Even if the project purpose were appropriately framed to drive alternatives in this case (which it has not), and even if the location was shown to be the only practicable site (which it has not), the applicant still would have to demonstrate that additional avoidance of the outstanding vernal pool resources on the site is impracticably expensive (or is otherwise technically or logistically infeasible). EPA strongly believes that further avoidance of waters is practicable at Cordova Hills, and that the applicant has not overcome the Guidelines' rebuttable presumption that this is so.

USEPA_2-9
cont.

Despite the serial analyses of alternatives in the Cordova Hills Environmental Impact Report by Sacramento County, the Corps' Environmental Impact Statement, and a "Modified Preferred Alternative" not yet fully analyzed under NEPA, the project proponents have yet to demonstrate any alternative represents the LEDPA, or complies with any of the other elements of the Guidelines restricting discharges of dredged or fill material into waters of the United States. Impacts to regional water quality remain uncertain as the Central Valley Regional Water Quality Control Board has yet to evaluate a CWA Section 401 water quality certification application for this project. Nor has the U.S. Fish and Wildlife Service (FWS) produced a Biological Opinion on this project. Indeed, in recognition of significant cumulative losses, the FWS priority in this region is on Section 10 Habitat Conservation Plans over individual Section 7 Biological Opinions.¹ These state and federal approvals are critical to determination of compliance with 40 CFR 230.10(b).

USEPA_2-10

Perhaps the greatest challenge for compliance with the Guidelines is the ability to mitigate impacts in the face of clear significant degradation of the aquatic ecosystem, to which Cordova Hills would both contribute (regionally) and cause (locally). Significant degradation may include individual or cumulative impacts to human health and welfare; fish and wildlife; ecosystem diversity, productivity and stability; and recreational, aesthetic or economic values (40 CFR 230.10(c)). Because of the significant degradation of vernal pool landscapes, across California and in the Cordova Hills vicinity in particular, the availability of appropriate mitigation has all but disappeared. A project such as Cordova Hills faces the independent tests under the Guidelines of both compensating for its own impacts (40 CFR 230.10(d)), and in the context of significant degradation, achieving a level of mitigation that ensures critical aquatic resources will degrade no further (40 CFR 230.10(c)).

USEPA_2-11

The science on the cumulative degradation of vernal pool landscapes is well established, voluminous, and indisputable. According to the most recent studies, California's Great Valley has lost over 90 percent of its wetlands and an even higher percentage of its riparian habitat.² Vernal pools persist at approximately 15 percent of their historical abundance, and continue to disappear at unsustainable rates. An estimated 135,000 acres of vernal pool grasslands were lost between 1995 and 2005, with 6,598 acres of Sacramento County vernal pool grasslands lost during this period. Between 2005 and 2012, an additional 1,563 acres of wetlands in the Great Valley have been lost.³

¹ May 20, 2014 Memo from Assistant Regional Director for Ecological Services Michael Fris to Pacific Southwest Region titled "Ecological Services Workload Prioritization"

² CA Water Quality Monitoring Council: http://www.mywaterquality.ca.gov/eco_health/wetlands/extent/loss.shtml, USGS: <http://www.npwrc.usgs.gov/resource/wetlands/wetloss/findings.htm>

³ Holland, R.F. 2009. California's Great Valley Vernal Pool Habitat Status and Loss: Rephotorevised 2005. Prepared for Placer Land Trust. http://www.vernalpools.org/vpreports/Great%20Valley%20Vernal%20Pool%20Distribution_Final.pdf

Witham, C.W., R.F. Holland and J.E. Vollmar. 2013. 2005 Great Valley Vernal Pool Map, Plus Merced, Placer and Sacramento County Losses 2005-2010. Sacramento, CA. Report prepared for the U.S. Fish and Wildlife Service and Bureau of Reclamation CVPIA Habitat Restoration Program under Grant Agreement No. 80270-A-G509 with the USFWS.

The Sacramento District has documented much of this loss, with particular attention to the “Mather Core Recovery Area” in which the Cordova Hills proposal is sited. Notably, the 2011 DEIS for the SunRidge Project (see Attachment 1 of the ROD) states (*emphasis added*):

- “e. The Corps recognizes the *significant cumulative loss of vernal pool wetlands within the Mather Core Recovery Area*. For future unavoidable impacts to vernal pool wetlands within the Mather Core Recovery Area, including those associated with the Arista del Sol project, the compensatory mitigation shall be:
- 1) based on a method for assessing the functions of all waters of the US on the project site;
 - 2) accomplished at a ratio greater than 1:1, after considering the direct and indirect impacts, temporal loss and difficulties creating vernal pool wetlands, and;
 - 3) *located in the Mather Core Recovery Area*, unless determined impracticable or inappropriate by the Corps.”

USEPA_2-11
cont.

In this context, Cordova Hills has proposed a mitigation plan that fails to meet the minimum 1:1 threshold of wetland establishment to wetland loss; what is established is “packed” into a few sites at unnaturally high densities. The compensation plan also relies on preserved waters of the U.S. to meet mitigation objectives, which by definition results in a net loss and can only occur under the regulations if all five substantive requirements of 40 CFR 230.93(h) i-v are met.

The ecosystem diversity of the Cordova Hills and adjoining Pilatus sites (both within the ownership of the applicant) is known to be outstanding based on the presence of numerous rare or endangered species and the extent of intact vernal pool complexes, named and unnamed drainages, seasonal wetlands and other waters of the U.S. The outstanding biological resource values documented for the Cordova and Pilatus sites combined include over 100 acres of some of the most intact and high-functioning vernal pool complexes remaining in the state. The area supports vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), and Sacramento Orcutt grass (*Orcuttia viscida*), all listed under the Endangered Species Act. Legenere (*Legenere limosa*), western spadefoot (*Spea hammondi*), and burrowing owl (*Athene cunicularia*) also occur on the site, with a high probability of Swainson’s hawk (*Buteo swainsoni*), northern harrier (*Circus cyaneus*), grasshopper sparrow (*Ammodramus savannarum*), and white-tailed kite (*Elanus leucurus*). These listed species or species of special concern are representative of the kinds of resources that occurred widely across the Mather Core Recovery Area before urban development destroyed the majority of the habitat.

USEPA_2-12

Given the information provided in the PN, the DEIS, and the constraints on where future mitigation can occur documented in the SunRidge ROD, we question Cordova Hill’s ability to fully and appropriately offset the loss of nearly 40 acres of outstanding vernal pool, seasonal wetland, and stream habitats. Under these circumstances, the EPA recommends permit denial.

Witham, C.W., R.F. Holland and J.E. Vollmar. 2014. Changes in the Distribution of Great Valley Vernal Pool Habitats from 2005 to 2012. Sacramento, CA. Report prepared for the U.S. Fish and Wildlife Service and Bureau of Reclamation CVPIA Habitat Restoration Program under Grant Agreement No. F11AP00169 with the USFWS.

- USEPA_2-1 *The comment states that since no project changes were identified since its earlier letter, USEPA objects to the project based on its opinion that the project would result in substantial and unacceptable impacts to aquatic resources of national importance.*
- Please refer to the responses to USEPA's previous comments USEPA-1 through USEPA-48. No changes to the text of the DEIS are required in response to this comment.
- USEPA_2-2 *The comment states that impacts to vernal pool wetlands within the Mather Core Recovery Area must be mitigated within this area, and that individual project authorizations are increasingly difficult under the protections established by the Clean Water Act (CWA).*
- Please refer to the responses to USEPA's previous comments USEPA-24 and USEPA-31 through USEPA-35. No changes to the text of the DEIS are required in response to this comment.
- USEPA_2-3 *The comment states that the Cordova Hills proposal has not demonstrated compliance with the 404(b)(1) guidelines. The comment states that the proposal has not been demonstrated to be the LEDPA, and has not demonstrated that it would not cause or contribute to significant degradation of the aquatic ecosystem.*
- Please refer to the responses to USEPA's previous comments USEPA-1, USEPA-2, USEPA-9, USEPA-16 through USEPA-18, USEPA-24, USEPA-26, and USEPA-27. No changes to the text of the DEIS are required in response to this comment.
- USEPA_2-4 *The comment states that the comments from its previous letter remain applicable to the USACE permitting decision.*
- Please refer to the responses to USEPA's previous comments USEPA-1 through USEPA-48. No changes to the text of the DEIS are required in response to this comment.
- USEPA_2-5 *The comment expresses the belief that the purpose statements have been inappropriately crafted and interpreted to limit alternatives to the applicant's proposal. The comment encourages USACE to consider the outcome of 3 separate 404(q) elevation decisions (described in detail in comments USEPA_2-6 through USEPA_28).*
- Please refer to the responses to comments USEPA-6 through USEPA-8. USACE disagrees that this overall project purpose limits alternatives to the project applicant's site-specific proposal. The overall project purpose is similar to that which has been used for the majority of the large development projects in the region, and is consistent with previous 404(q) elevation decisions, including Hartz Mountain, Old Cutler Bay, and Twisted Oaks. See responses to comments USEPA_2-6 through USEPA_2-8. No changes to the text of the DEIS are required in response to this comment.

The comment references the Hartz Mountain 404(q) elevation decision and states that Hartz Mountain emphasized the Corps' responsibility to independently: 1) "determine the minimum feasible size, circumstances, etc., which characterize a viable large scale, high density housing project," and 2) develop an alternatives analysis that is "objective and balanced, and not used to provide a rationalization for the applicant's preferred result..." The comment also states that the Corps' Proposed Action in the DEIS appears to have uncritically accepted the precise size and location of development for which the applicant has gained local entitlements, despite its isolation from other development and waters impacts.

The commenter refers to "the Corps' proposed action." USACE is neither a proponent nor an opponent of the project analyzed in the DEIS; the "Proposed Action" in the DEIS is the Applicants' Proposed Action, and the Applicant's Preferred Alternative in the FEIS is the Applicant's Preferred Alternative. USACE is responsible for making a permit decision on the Proposed Action. The decision options available to USACE are issue the permit, issue with modifications or conditions, or deny the permit (33 CFR 325, Appendix B(9)(b)(5). A critical component of this permit decision is the evaluation of alternatives for compliance with NEPA, the CWA Section 404(b)(1) Guidelines, and the public interest review.

The project purpose specifies "a large-scale, master-planned, mixed-use development, with associated infrastructure, within the Urban Services Boundary in southeastern Sacramento County." As described in the DEIS in Section 2.9.2 of Chapter 2, "Description of the Proposed Action and Alternatives," alternative project locations in the Urban Services Boundary (USB) were considered; as illustrated on Exhibit 2-29, "Location of North of Glory Lane Off-Site Alternative," much of the area within the USB is unavailable, either because of an existing USACE permit or a pending or expected permit application. One site of sufficient size to accommodate a "large-scale master-planned, mixed-use development" was identified, and screened from further NEPA analysis as described in the DEIS. USACE also considered various configurations and sizes of development on-site. The DEIS analyzed alternatives with impacts ranging from 9.38 acres of jurisdictional waters of the U.S. to 39.79 acres as shown in Table 2.2. Maximum dwelling units under the alternatives ranged from 4,155 to 8,000. These alternatives are described and analyzed in detail in Chapter 2 of the DEIS (Sections 2.5 – 2.8) and Chapter 3. Additionally, as part of ongoing coordination with the applicant to avoid and minimize impacts to jurisdictional waters of the U.S., the applicant has revised the Proposed Action to further reduce direct adverse effects to waters of the U.S. on the site. This "Modified Proposed Action" is identified as the Applicant's Preferred Alternative in the FEIS and described in Chapter 2, "Modified Proposed Action."

In the determination of the LEDPA conducted for compliance with the CWA Section 404(b)(1) Guidelines, USACE will develop screening criteria to determine which alternative(s) is/are "practicable" as defined by 40 CFR Section 230.10(a)(2) which states that "an alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." This analysis and determination of the LEDPA will be presented in the ROD. The project needs and objectives identified in Chapter 1.3.2 of the DEIS are those as identified by the applicant and are not screening criteria developed by USACE that are necessary to determine the LEDPA. Within the

DEIS and the draft CWA Section 404(b)(1) Alternatives Information included in the DEIS, the applicant identified “up to 8,000 units” as a screening criteria for meeting the overall project purpose, which was based on the Sacramento County development order, a variety of potential future forcing functions, and meeting a large number of Federal, State and local requirements. Based on USACE comments requesting information to justify 8,000 units, in their February 11, 2015, response to the December 2, 2014, comments provided by USACE on the applicants July 2014, CWA Section 404(b)(1) Alternatives Information, the applicant identified a range of units of approximately 7,740 to 9,465 dwelling units on approximately 1,062.3 to 1,227.2 residential developable acres as a screening criteria for an alternative to meet the overall project purpose. The applicant indicated that the actual number of units constructed will depend on the ultimate development of the mixed use area which will include more or less housing units depending on the acres utilized by retail, office, and commercial use, and economic factors driving the overall project. The applicant has stated that any further reduction in the lower end of the range of units or acres required for such a development would not allow a viable project and would be “unreasonably expensive to the applicant”. In order for USACE to utilize the proposed range of residential units, or residential developable acres as screening criteria for the overall project purpose, the applicant must provide adequate justification to support these ranges in their updated CWA Section 404(b)(1) Alternatives Information. In developing any screening criteria, USACE will take into consideration the needs and objectives of the applicant, but will exercise independent judgment.

USACE has not made a determination regarding the practicability of the Proposed Action or any other alternative, including those alternatives evaluated in the DEIS or any other alternatives to the Proposed Action evaluated for compliance with the CWA Section 404(b)(1) Guidelines. USACE is currently coordinating with the applicant to obtain all information necessary to determine compliance with the CWA Section 404(b)(1) Guidelines, which includes information for justification of any proposed land-uses associated with a mixed-use development. The decision on whether to issue or deny the permit for the Applicant’s Preferred Alternative will be made by USACE in the ROD.

The Hartz Mountain headquarters 404(q) elevation decision refers to the formulation of the project purpose and the methodology for conducting the CWA Section 404(b)(1) alternatives analysis, which is being conducted separately from the NEPA analysis. The overall project purpose as identified for the Cordova Hills project is consistent with and similar to the project purposed identified for Hartz Mountain, and is neither too restrictive nor too broad. Because the statement that USACE has “uncritically accepted the precise size and location of development for which the applicant has gained local entitlements, despite its isolation from other developments,” is incorrect, it is not clear why EPA believes that the overall project purpose identified in Section 1.3.1 of the DEIS is not consistent with the Hartz Mountain decision. Following the review of revised CWA Section 404(b)(1) Alternatives Information from the applicant, if USACE determines that adequate justification has been provided for the identified range of residential units or residential developable acres, then USACE may use this as a screening criteria, which would be consistent with the determination of the Hartz Mountain decision.

Please refer to the responses to USEPA's previous comments USEPA-1, USEPA-2, USEPA-9, and USEPA-16 through USEPA-18.

USEPA_2-7 *The comment references the Old Cutler Bay 404(q) elevation decision and states that the consideration of alternative project locations does not conform to USACE headquarters guidance related to Old Cutler Bay.*

See response to comment USEPA_2-6.

The Old Cutler Bay headquarters 404(q) elevation decision refers to the formulation of the project purpose and the methodology for conducting the CWA Section 404(b)(1) alternatives analysis, which is being conducted separately from NEPA analysis. In the case of Old Cutler Bay, USACE determined that the project purpose identified by USACE was too restrictive, as it identified the number of residential units proposed to be constructed. The overall project purpose identified for the Cordova Hills project is consistent with the USACE determination in Old Cutler Bay, and neither too restrictive nor too broad. Please refer to the responses to USEPA's previous comments USEPA-1, USEPA-2, USEPA-9, and USEPA-16 through USEPA-18.

USEPA_2-8 *The comment references the Twisted Oaks 404(q) elevation decision and states USACE did not independently evaluate the need for certain project features. The comment asserts that the inclusion of functionally independent elements (housing, a regional university, and commercial development) as a single project purpose has inappropriately limited the consideration of alternatives. The comment also identifies that EPA is aware of at least four university campuses under consideration within 20 miles of the Cordova Hills site.*

See response to comment USEPA_2-6 and USEPA_2-7. In accordance with USACE regulations at 33 CFR 320.4(j)(2), the primary responsibility for determining zoning and land use matters rests with State, local, and tribal governments, and USACE will normally accept decision by such governments on those matters unless there are significant issues of overriding national importance. The project applicant is proposing to construct a mixed-use development, consisting of residential development, commercial development, a regional university, schools, parks, and associated infrastructure. As noted on page 1-1 of the DEIS, Sacramento County accepted an application in May 2008 to move the boundary of the County's Urban Policy Area (UPA) to include the Cordova Hills site. As noted on page 1-4 of the DEIS, the Sacramento County Board of Supervisors approved the filing of an amendment to the project application. As discussed on page 1-5 of the DEIS, Sacramento County released a Draft Environmental Impact Report (EIR) on January 9, 2012, released a Final EIR on November 28, 2012, and the County certified the EIR, adopted the Findings of Fact and Statement of Overriding Considerations, and adopted the Cordova Hills Master Plan on January 29, 2013. USACE has determined that it is not appropriate to dictate the specific land uses that would be needed for the construction of a mixed-use development. However, through evaluation of alternatives for compliance with the CWA Section 404(b)(1) Guidelines, which will be completed in the ROD, USACE will evaluate the size and location of applicable land use types. USACE acknowledges that other university campuses are or may be proposed for development in the future. The applicant has provided information showing that there is a need for colleges and/or universities in the region.

The Twisted Oaks Joint Venture headquarters 404(q) elevation decision identified that it is appropriate to include multiple elements into an overall project purpose, and affirmed that it was appropriate to identify an overall project purpose for a residential development having water related recreational amenities. The elevation decision states that “since this project includes two elements, a proposed recreational impoundment and a residential development, a definition of project purpose excluding either one would not be sufficient.” The decision also noted that even where a project purpose includes multiple elements, USACE must still develop an “alternatives analysis that seeks to avoid adverse impacts to aquatic resources.” As noted in responses to comments USEPA_2-6 and USEPA-12, USACE has considered an appropriate range of alternatives and continues to work with the applicant to ensure impacts to jurisdictional waters are avoided and minimized to the maximum extent practicable. It is unclear from the comment how the overall project purpose identified in Section 1.3.1 of the DEIS is contrary to the Twisted Oaks Joint Venture 404(q) elevation decision. It is also unclear how the Twisted Oaks Joint Venture 404(q) elevation decision is applicable to development on the Cordova Hills site.

USEPA_2-9 *The comment states that costs have been inappropriately framed for Cordova Hills by comparing alternatives to the Proposed Action rather than to an “average” project in the market area. The comment asserts that further avoidance of waters on the project site is feasible.*

See the response to USEPA’s previous comment USEPA-13. Also, the applicant has proposed additional avoidance of waters on the project site as described in this FEIS Chapter 2, “Modified Proposed Action”.

USEPA_2-10 *The comment states that the project proponents have not yet demonstrated that any alternative represents the LEDPA or complies with the other elements of the guidelines. The comment also states that impacts to regional water quality remain uncertain because the Central Valley Regional Water Quality Control Board has yet to evaluate a CWA Section 401 water quality certification application. Further the comment notes that the U.S. Fish and Wildlife Service has not produced a Biological Opinion for the project.*

USACE concurs with USEPA’s statement that the project proponents have not yet demonstrated that any alternative represents the LEDPA or complies with the CWA Section 404(b)(1) Guidelines. In addition, USACE concurs that a Section 401 Water Quality Certification has not been issued by the Central Valley Regional Water Quality Control Board and that a Biological Opinion has not been issued by the U.S. Fish and Wildlife Service. The impacts of the alternatives on Federally-listed threatened and/or endangered species and water quality are described in Chapters 3.4 and 3.10 of the DEIS. Please refer to responses to USEPA’s previous comments USEPA-1, USEPA-2, USEPA-6, USEPA-9, USEPA-16 through USEPA-18, and USEPA-20 and USEPA-21.

USEPA_2-11 *The comment states that Cordova Hills has proposed a mitigation plan that fails to meet the minimum 1:1 threshold of wetland establishment to loss, and that proposed wetlands are “packed into sites at unnaturally high densities. The comment also asserts that regulatory requirements necessary for reliance on preserved waters as mitigation have not been met.*

Please refer to responses to USEPA's previous comments USEPA-24, USEPA-29, and USEPA-31 through USEPA-35.

USEPA_2-12 *The comment recommends permit denial.*

The DEIS documents the review of the project under NEPA. USACE cannot issue a permit for an action unless it is determined that the action is not contrary to the public interest and complies with the CWA Section 404(b)(1) Guidelines. Please refer to the response to USEPA's previous comments USEPA-1, USEPA-2, USEPA-9, and USEPA-16 through USEPA-18.

USFWS



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W-2605
Sacramento, California 95825-1846

In Reply Refer to:
81420-
2008-TA-1203

SEP 29 2015

Ms. Lisa Gibson
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Subject: Review of the November 2014 *Draft Cordova Hills Environmental Impact Statement*

Dear Ms. Gibson:

The Fish and Wildlife Service (Service) has reviewed the November 2014 *Draft Cordova Hills Environmental Impact Statement* (Draft EIS) and provides the following comments for your use in complying with the National Environmental Policy Act (NEPA). We recognize that public comment period for the Draft EIS has passed; however, as discussed at our August 3, 2015 meeting, we hope our comments will be useful as you continue to work with the applicant to identify a Least Environmentally Damaging Practicable Alternative and a Final EIS.

USFWS-1

We review and comment on other agency environmental documents to accomplish the following: 1) encourage agencies to contribute to the maintenance and enhancement of fish and wildlife during their actions; 2) assure that all potential beneficial and adverse effects of a proposed action, and alternatives to a proposed action, are recognized by the lead agency, and are understandable to the general public and decision-makers; 3) assure that all practicable alternatives less damaging to fish and wildlife resource are adequately described, realistically evaluated, and adopted where feasible; 4) assure that mitigation measure to offset unavoidable losses are adequately developed and included as part of the preferred alternative (505 FW 3).

The types of resources for which we are authorized to comment and to recommend or require mitigation include the Service's trust resources (migratory birds, federally endangered and threatened species, some marine mammals, and inter-jurisdictional fish), and those resources that contribute broadly to the ecological functions that sustain species. Statues that address systemic concerns and provide our authority for protecting habitats and landscapes include the Fish and Wildlife Act of 1956 (16 U.S.C. 742(a)-754), the Fish and Wildlife Coordination Act (16 U.S.C. 661-667(e)), the Watershed Protection and Flood Prevention Act (16 U.S.C. 1001-1009), Section 404 of the Clean Water Act (33 CFR 320.4), the Migratory Bird Conservation Act (16 U.S.C. 715 et seq.) the Migratory Bird Treaty Act (16 U.S. C 703-712), the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)(ESA), the National Environmental Policy Act (42 U.S.C. 4321-4347) (NEPA), and other statutes. We have a responsibility to ensure that impacts to plants, birds, fishes, mammals, all other classes of wild animals, and all aquatic and land vegetation upon which they are dependent are considered when federal actions are planned. Consistent with Congressional direction through these statues, we are expected to provide effective recommendations to conserve, protect, and enhance

USFWS-2

Ms. Lisa Gibson

2

fish, wildlife, plants, and their habitat when a proposed action or alternative may reduce the benefits thereof to the American people.

USFWS-2
cont.

The Proposed Action involves the construction of single-family residences, commercial, open space parks/preserves, roads, and associated infrastructure on approximately 2,688 acres. The Proposed Action would offset habitat losses associated with this development through the establishment of four onsite preserves (the western "Plateau" preserve, the central drainage's "Paseo Preserve" and "University Preserve", and the eastern "Carson Creek" Preserve), and the creation of three off-site preserves (Chester Drive Property, Shehadeh Property, and the Carson Creek East Property).

USFWS-3

The Sacramento Fish and Wildlife Office is currently working with Sacramento County (County), the Sacramento District of the Corps (Corps), the California Department of Fish and Wildlife, and other stakeholders and interested parties, to complete the South Sacramento Habitat Conservation Plan (SSHCP). The project, as described, has completed local environmental review under the California Environmental Quality Act, received entitlements from the County, and applied to the Corps for a Clean Water Act section 404 permit in advance of completion of the SSHCP and issuance of an Endangered Species Act section 10(a)(1)(B) permit. Therefore, the comments herein are intended to reflect our perspectives and recommendations on the Cordova Hills Project as an independent project and are not appropriate as comments on the project as it is described in the draft SSHCP.

USFWS-4

Individual projects differ significantly in their conservation value. Therefore, the Service must analyze individual projects differently than projects that are proposed as part of a regional conservation plan. Generally, project-by-project mitigation results in greater habitat fragmentation, greater isolation of species populations, reduced opportunities to assemble a preserve system that operates on a landscape scale, fewer economic resources to leverage for desirable preserve properties, and less uniform preserve management and monitoring, when compared to what is achieved through a regional conservation strategy. Regional conservation strategies are typically better funded and thus more able to achieve explicit landscape scale conservation goals and objectives for species and habitats and more able to provide for uniform and adaptive management and monitoring.

USFWS-5

General Comments

1. The description of the Proposed Action appears to change in different chapters, sections, and appendices of the Draft EIS. For example, the executive summary states that the University is no longer part of the Proposed Action or any Action Alternative, but the University is described as part of the Proposed Action in all Draft EIS Chapters. Also, the size and shape of the onsite Plateau Preserve differ between the Draft EIS Chapters and the Preserve Management Plan described in Appendix N. These differences would change the impacts of the project on the Service's trust resources.

USFWS-6

USFWS-7

2. We believe the Draft EIS did not fully analyze impacts of activities associated with and necessary to accommodate the Cordova Hills Project that are likely to result in impacts to trust resources. For example:

- a. Draft EIS Chapter 2 describes widening of Grant Line Road from two to four lanes and describes multiple intersection improvements along Grant Line Road. Table 2-8 states that these road improvements are required CEQA mitigation measures that were identified in the Cordova Hills EIR prepared by the County and the project proponents. Therefore, these Grant Line Road activities were originally perceived as unified and interdependent with the

USFWS-8

proposed development activities. We believe that the Grant Line Road improvements described in Table 2-8 could result in direct and indirect effects to Service trust resources. However, Chapter 2 of the Draft EIS states that this roadwork will not be analyzed as a component of any Draft EIS Action Alternative, but instead will be considered only as part of a broader cumulative effects analysis. We believe that approach could result in “segmentation” of the project and the associated Federal permits, which could mask the full extent of the project’s impacts.

USFWS-8
cont.

b. Similarly, Draft EIS Chapter 2 states that new water pipelines and a new water storage tank would be constructed on the Pilatus property located directly north of the Cordova Hills Project site, but potential direct and indirect impacts of this were not analyzed.

USFWS-9

c. The applicant proposes to place multiple detention basins along the outer edges of the proposed Paseo Central Drainage Preserve and other locations. We anticipate that construction and operation of these features will result in both direct and indirect effects to Service trust-resources resulting from the construction and long-term operation of these basins, including effects from changes in hydrology to existing vernal pools or ephemeral drainages that provide habitat for federally listed vernal pool species.

USFWS-10

3. Impacts of Community Trails and road crossings proposed in on-site preserves, compensatory wetland construction within on-site preserves, and grading adjacent to on-site preserves are greater than characterized in the Draft EIS:

a. Chapter 3 (section 3.4.7) of the Draft EIS concluded that no indirect effects would occur to existing vernal pool habitat within the onsite avoided “Plateau Preserve”. Based on information provided in the Draft EIS, we are unable to verify this assumption. Vernal pool habitat within the onsite preserves likely will be degraded over time due to edge effects, such as changes in surface and sub-surface hydrology, increases in erosion from runoff from impervious surfaces, trespassing, trash accumulation, vandalism, illegal dumping, increases in invasive plant species, and effects to water quality from pesticides and fertilizers. The proposed onsite preserves would be fragmented by multiple proposed road crossings and two asphalt Community Trails that will introduce these edge effects into the interior of the Preserve. In the long-term, aquatic vernal pool habitat may remain, but these stressors may degrade the environmental conditions of many vernal pools to the point that they will no longer provide suitable habitat for the federally listed vernal pool species, including along the narrow Central Drainage where development will occur on both sides and along the full length of the drainage.

USFWS-11

b. We believe the construction and the long-term operation of the two 30- to 50-foot wide Cordova Hills Community Trails corridors may impact ecosystem functions and species habitat within the preserves, and will result in impacts that are greater than characterized in the Draft EIS for the reasons stated above in 3.A. Therefore, acreage within the entire width of each Community Trail corridor should be excluded from the onsite preserves.

USFWS-12

c. The proposed construction of compensatory-wetlands within the onsite preserves and in proximity to existing natural vernal pools likely will result in impacts to the existing hydrologic and ecological functions of both the natural vernal pools and the adjacent supporting uplands (pollinators, burrowing animals, the soil’s perched aquifer, etc.). The *Conceptual Wetland Mitigation Proposal for the Cordova Hills Project* (appendix N of the Draft EIS) indicates that vernal pool creation is proposed within 11 areas of the onsite “Plateau” Preserve, as well as within the three proposed off-site preserves. These vernal pool creation

USFWS-13

activities will require grading and re-contouring within close proximity to existing vernal pools. These actions may result in lower habitat function for the existing vernal pools, due to increases in soil erosion, changes in surface and sub-surface hydrology, and other factors. We may determine that existing vernal pools within close proximity (within the microwatershed) of the proposed created vernal pools will not be acceptable for use as compensation for adverse effects to vernal pool species or waters of the U.S. because this practice may degrade the functionality of the existing natural vernal pools.

USFWS-13
cont.

d. The Draft EIS chapters and Appendix N describes various designs for 50-foot wide setbacks located between the boundary of each on-site preserve and the proposed urban development. Based on the Draft EIS description of each set-back design, (including the location of recreation facilities constructed in the set-backs, the construction of facilities within the setbacks to collect urban runoff/nuisance flows from adjacent development, setback grading and subsequent seeding with “native straw,” and the construction of detention basins), we do not agree that the proposed preserve set-back designs will function as a “buffer” to effectively avoid or minimize indirect impacts to vernal pools and species habitats within the onsite preserves. The Draft EIS concluded that no indirect effects would occur to existing vernal pool habitat within the onsite avoided “Plateau” Preserve. Based on the information provided in the Draft EIS, we are unable to verify this assumption. Vernal pool habitat within the onsite preserves will likely be indirectly affected due to grading within close proximity (possibly directly adjacent) of the proposed preserve boundary, which may fully remove the soil’s perched aquifer. We anticipate greater adverse effects to vernal pool habitat, as described in 3.A. above.

USFWS-14

4. We agree that indirect effects on Sacramento Orcutt grass (*Orcuttia viscida*) and legenera (*Legenere limosa*) could occur from human intrusion, hydromodification, or pollutant discharge resulting from adjacent residential and road development that will degrade the occupied habitat (Draft EIS page 3.4-67). We believe that the long-term persistence of the on-site Sacramento Orcutt grass population is uncertain due to the proximity of the proposed North Loop Road, which will make this population vulnerable to gradual long-term habitat degradation and edge effects resulting from construction, operation, and maintenance of this road.

USFWS-15

5. The project site is one of the largest areas of relatively unaltered vernal pool grasslands remaining in the Mather Core Recovery Area and in east Sacramento County. Each Action Alternative, including the Proposed Action, would result in the destruction of a sizable portion of this environmentally valuable and scarce resource. Based on information provided in the Draft EIS, we cannot verify that the proposed mitigation is commensurate with the quality or quantity of impacted resources. For example, the Chester Drive property is highly disturbed and fragmented. Likewise, The *Conceptual Wetland Mitigation Proposal for the Cordova Hills Project* (Draft EIS Appendix N) indicates that vernal pool tadpole shrimp have been detected at both the Shehadeh and Chester Drive property; however, vernal pool fairy shrimp have not been confirmed at either of these sites. In addition, as indicated in comments 2 and 3 above, we anticipate greater impacts to federally listed species and their habitat than was characterized in the Draft EIS.

USFWS-16

6. Draft EIS Section 3.4.7 describes a GIS and statistical study conducted by ECORP to “estimate the micro-watershed size necessary to sustain “normal” hydrologic function of vernal pools and season wetland on the Cordova Hills site (ECORP 2001c).” We have not fully reviewed or analyzed this report or the methods and models used. Therefore, we do not agree with Corps’ conclusions that only 1.3 or 1.4 acres of upland watershed are needed to maintain “normal” hydrologic functions of each acre of vernal pool on the Cordova Hills site. Similarly, we do not agree with the conclusion that only 0.032 acres of vernal pools within the proposed onsite preserves could be indirectly

USFWS-17

Ms. Lisa Gibson

5

impacted by adjacent the urban development and the Community Trails that will cross the Plateau Preserve.

USFWS-17
cont.

7. We do not agree that the site-specific analysis of the Cordova Hills site (Appendix M of the Draft EIS) provides any data that supports the “refinement” of the Mather Core Recovery Area boundary within the Cordova Hills site, as stated on page 3.4-64 of the Draft EIS. Nor do we agree that there is any “evidence that the authors of the 2005 Recovery Plan for Vernal Pools of California and Oregon may have intended for the eastern edge of the proposed Plateau Preserve to serve as the boundary of the Mather Core Recovery”.

USFWS-18

8. We do not agree with the assumption that if protocol surveys are performed and all listed crustacean species are absent, then Ricksecker’s water scavenger beetle may also be presumed absent, or that no further mitigation shall be required for listed vernal pool invertebrates (Draft EIS page 3.4-64).

USFWS-19

9. We do not agree that the project proponent needs to prepare a pesticide and pollution prevention plan only when construction activities will encroach within 250-feet of vernal pools that are known to support Sacramento Orcutt grass or legenera (Draft EIS page 3.4-66). Pesticides and other pollutants are also harmful to other vernal pool biota.

USFWS-20

Recommendations

Based on the above general comments, our recommendations are provided below:

1. Consistent with the criteria set forth in 40 CFR 1502.9(c), we recommend the Corps revise or supplement the Draft EIS to clarify the content and description of each Action Alternative, including the Proposed Action, so that all elements of each Action Alternative are the same in all Chapters, Sections, and Appendices.

USFWS-21

2. Consistent with the criteria set forth in 40 CFR 1502.9(c), we recommend the Corps revise or supplement the Draft EIS to fully describe the impacts of activities interrelated and interdependent with Cordova Hills development that is described in the Proposed Action and in each Action Alternative, including improvements to Grant Line Road described in Chapter 2; all off-site facilities on the Pilatus property; and detention basins in the Central Paseo Preserve.

USFWS-22

3. Regarding Community Trails, construction of compensatory wetlands, and preserve setbacks:

a. We recommend the Draft EIS address the proposed footprint and potential impacts of Community Trails crossings of the onsite preserves in a manner similar to the proposed footprint and impacts of roadway crossings of the onsite preserves (i.e. similar to the proposed North Loop Road, University Road, Town Center Road, etc.), and revise Figure 2-8 accordingly. The Draft EIS should address the long-term (50+ years) effects of the above-mentioned stressors of the proposed Community Trails and roadway crossings on the biological and physical functions of vernal pool grasslands, and plant and animal species that comprise the vernal pool ecosystem upon which the listed vernal pool species depend. We may determine that it is not biologically appropriate to utilize vernal pools within close proximity to the community trails, the new roadways, or the new urban areas as compensation for adverse effects to vernal pool species.

USFWS-23

USFWS-24

b. We believe that the stated purposes and needs for Corps action (identified in Draft EIS Section 1.3.1), as well as all project needs and objectives identified by the project proponent

USFWS-25

(in Draft EIS Section 1.3.2) can be achieved by a Proposed Action and by other Action Alternatives that do not include Community Trails constructed through the onsite preserves, and do not include vernal pool creation within the onsite preserves. Therefore, we recommend that the Corps revise or supplement the Draft EIS to include a new Proposed Action and additional Action Alternatives that: 1) do not include Community Trails constructed in the onsite preserves, 2) do not include vernal pool creation within the onsite preserves, and 3) include wider setbacks/buffers between the proposed onsite preserves and the deep grading and disturbances caused by urban development construction.

USFWS-25
cont.

c. Direct and indirect effects to existing vernal pools resulting from vernal pool creation activities would need to be offset either through additional preservation of high quality vernal pool habitat or by not creating pools within intact vernal pool landscapes. We prefer and recommend that compensatory wetland mitigation be constructed on degraded landscapes that formerly supported vernal pools, rather than in uplands between existing functional pools. We can provide the Corps with guidelines for compensatory wetland construction that will minimize adverse effects to existing vernal pool habitat.

USFWS-26

d. We recommend that the Proposed Action and other Action Alternatives incorporate additional design measures to reduce edge effects to the vernal pool preserves, such as single-loaded streets, locating open space and passive recreation adjacent to onsite preserves, larger or more effective buffers and setbacks around all onsite preserves, and eliminating the Community Trails that would bisect the proposed onsite preserves.

USFWS-27

4. Protection of Sacramento Orcutt grass: Draft EIS Sections ES.6.5 and 2.7 state that the Cordova Hills Project proponent also owns the property adjacent to the north boundary of the Cordova Hills Project site (i.e. the Pilatus site). We agree that alternatives which include the Pilatus site are reasonable alternatives under NEPA (i.e. are practical and feasible both technically and economically, based on common sense). Therefore, additional Action Alternatives that include the Pilatus site should be rigorously explored and objectively evaluated by the Corps in a revised Draft EIS. Specifically, we recommend that the Draft EIS analyze alternatives that avoid placing the proposed North Loop Road, located in the northeast portion of the proposed Plateau Preserve, between the onsite occurrences or within the microwatersheds of the endangered Sacramento Orcutt grass (*Orcuttia viscida*). Because Sacramento Orcutt grass is endemic only to Sacramento County, the Cordova Hills occurrences are critical for the conservation and the recovery of the species, and these on-site occurrences should be preserved and managed as a single habitat unit. Draft EIS alternatives that re-locate the proposed North Loop Road onto the Pilatus site or to other locations would better protect and conserve this very rare endangered species.

USFWS-28

5. We believe, and thus recommend, that it is more biologically appropriate to preserve greater acreage of higher-quality vernal pool grassland habitat than to offset the loss of high-quality vernal pool habitat that will result from each Action Alternative, including the Proposed Action. In addition, additional assurances are needed that the mitigation proposed for each Action Alternative will adequately offset direct and indirect impacts to this high-quality vernal pool grassland habitat and impacts to all adversely affected federally listed species.

USFWS-29

a. The Proposed Action will result in the loss of substantial acreage of vernal pool habitat within the Mather Core Recovery Area (MCRA). We recommend that any off-site preserves be located within the MCRA. However, the proposed Carson Creek East mitigation site is located outside of the MCRA.

USFWS-30

Ms. Lisa Gibson

7

- b.* Confirming presence of vernal pool fairy shrimp on Shehadeh and Chester Drive properties is necessary to ensure the appropriateness of these proposed off-site preserves to offset losses to this species.

USFWS-31

6. The CEQ's "40 Questions" encourages agencies reviewing a Draft EIS to make recommendations on the selection the environmentally preferable alternative. Based on the information and analysis presented in the Draft EIS, we have identified the Expanded Drainage Preservation Alternative as the alternative that will best promote the national environmental policy expressed in NEPA's Section 101.

USFWS-32

In summary, the current Draft EIS is not complete in its analysis of the potential impacts to fish and wildlife resources, and potential controversy exists as to the environmental consequences of the Proposed Action and the other Action Alternatives. We believe that the additional information, impact analyses, and additional alternatives described above may be necessary. We recommend that the Corp prepare and recirculate a revised Draft EIS on the Cordova Hills Project, in accordance with 40 CFR 1502.9(a).

USFWS-33

Other Comments

Based on the issues and recommendations outlined above, the Draft EIS is not suitable to use as a Biological Assessment for the purposes of an Endangered Species Act section 7 consultation. We wish to make the Corps and the project applicant aware of the nature of our concerns and further discussions that need to occur before a formal consultation can be initiated.

USFWS-34

Other documents that we would need to review and approve for each of the four proposed preserves, at a minimum, include:

- a.* the conservation easement (held by a Service-approved third party);
- b.* the management and monitoring plan that contains detailed information regarding livestock management strategies, including type of livestock (e.g., cattle, sheep, or goats), timing of livestock use; and areas proposed for livestock management infrastructure (e.g., corral locations, fencing, and number and locations of livestock water sources);
- c.* an endowment fund that fully funds the maintenance, management, and monitoring of the proposed preserves in perpetuity; and
- d.* the Property Analysis Record (PAR analysis).

USFWS-35

Ms. Lisa Gibson

8

Thank you for the opportunity to review the Draft EIS for the Cordova Hills Project. We are available to meet with Corps staff to discuss our comments and concerns, and we offer our continued cooperation and assistance with the Corps' NEPA process for the Cordova Hills Project.

If you have questions, please contact Nina Bicknese, Senior Fish and Wildlife Biologist at (916) 414-6633, or Rick Kuyper, Senior Fish and Wildlife Biologist, Endangered Species Program, at (916) 414-6649.

Sincerely,



Jennifer M. Norris
Field Supervisor

cc:

Mr. Jason Brush, Environmental Protection Agency, San Francisco, California
Mr. Surinder Singh, Sacramento County, Sacramento, California
Mr. George Dellwo, Sacramento County, Sacramento, California
Mr. Rich Radmacher, Sacramento County, Sacramento, California
Mr. Ron Alvarado, Sacramento, California

USFWS-1 *The comment indicates that the U.S. Fish and Wildlife Service (USFWS) has reviewed the DEIS for the Cordova Hills Project and acknowledges that the public comment period has passed, but hopes their comments will be useful in identifying a LEDPA and preparing a FEIS.*

USACE acknowledges receipt of the letter from USFWS and their wish to assist with identification of the LEDPA. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-2 *The comment lists USFWS' objectives, responsibilities, and authorizations for reviewing other agency environmental documents.*

USACE acknowledges USFWS' objectives, responsibilities, and authorizations for reviewing and commenting on the DEIS. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-3 *The comment summarizes the Proposed Action and how habitat losses associated with development are proposed to be offset through establishment of four onsite preserves and creation of three offsite preserves.*

The comment adequately summarizes the Proposed Action, except the project is actually 2,668 acres not 2,688 acres. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-4 *The comment states that USFWS has evaluated the Cordova Hills project as an independent project from the SSHCP, which USFWS is working to complete with other agencies and stakeholders, and that comments on the project as it is described in the draft SSHCP are not appropriate .*

The comment is noted and USACE understands that USFWS is commenting on the Proposed Action as an independent project and not within the context of the SSHCP. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-5 *The comment states that USFWS must analyze individual projects differently than projects proposed as part of a regional conservation plan and that regional conservation strategies generally result in better outcomes than project-by-project mitigation.*

The comment is noted. USACE understands the advantages of regional conservation plans and encourages participation in such plans where they are available. The SSHCP has been under development since 1992 and has not yet been completed or adopted, however the Regional Conservation Alternative evaluated in the DEIS is consistent with the working draft SSHCP at the time the DEIS was released. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-6

The comment states that the description of the Proposed Action appears to change in different parts of the DEIS, and provides an example identifying that the executive summary states that the University is no longer part of the Proposed Action or any Action Alternative, but the University is described as part of the Proposed Action in all DEIS Chapters.

The only example of inconsistencies provided in the comment by USFWS is related to the proposed University, and USACE has reviewed the DEIS and has not found any inconsistencies in the Proposed Action as described throughout the DEIS. In addition, the Proposed Action has changed since the Draft EIS, and the changes are described in Chapter 2, “Modified Proposed Action” of the Final EIS. With regards to the inconsistencies identified by USFWS related to the University, to clarify, the Executive Summary in the Draft EIS does not state that the University is no longer part of the Proposed Action or any Action Alternative. However USACE does acknowledge that the University is not specifically identified in the Executive Summary, including ES.6, “Alternatives,” as the Executive Summary identifies only that each alternative (with the exception of the No Action Alternative) would result in the construction of a mixed-use development, and does not identify any specific land-uses that would occur under the Proposed Action or any other alternative. The proposed University is considered a type of land use that would occur under the Proposed Action and other alternatives evaluated in the EIS, similar to residential, commercial, recreational and other institutional uses. As noted throughout Chapter 1, “Introduction and Statement of Purpose and Need,” of the DEIS, development of a major university/college campus is a project objective. As noted on page 1-4 of the DEIS (footnote 1), the University of Sacramento is no longer expected to be the user of the proposed higher education campus; however, use of the site for an institution of higher education remains a component of the project. This is clearly stated on Page 2-16 of the DEIS as follows: “The Cordova Hills Master Plan includes concept plans for a future University/College Campus Center. Although a university user has not been identified for the site, the project applicant is working to recruit a university entity. For the purposes of this EIS, it is assumed that a university would be constructed.” Each alternative evaluated in the EIS, with the exception of the No Action alternative contains a proposed University, as well as other land-use elements. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-7

The comment states that the size and shape of the onsite Plateau Preserve differs between the DEIS chapters and Appendix N.

USACE agrees with the comment by USFWS that the size and shape of the onsite Plateau Preserve differs between the DEIS and Appendix N of the DEIS. The DEIS describes and analyzes the effects of the Proposed Action as identified in the 404 permit application submitted to USACE in 2011. Prior to issuance of the DEIS, the project applicant submitted updated CWA Section 404(b)(1) Alternatives Information identifying that the Modified Proposed Alternative appears to be practicable and would result in fewer impacts to waters of the U.S. than the Proposed Action evaluated in the DEIS. The Modified Proposed Action Alternative is described in full in Chapter 2, “Modified Proposed Action” of the FEIS, and is the Applicant’s Preferred Alternative. Appendix N in the Draft EIS contained the applicant’s proposed mitigation plan, which the applicant prepared based on the loss of waters of the U.S. associated with the Modified

Proposed Action Alternative. The Applicant's Preferred Alternative identified in the FEIS and the Proposed Action evaluated in the DEIS are not the same and do not present the same preserve size and configuration. Appendix N has been updated to include the applicant's most recent proposed mitigation plan, and is included for review and comment in the FEIS. USACE has not yet fully evaluated the applicant's proposed mitigation plan to determine if it is sufficient to compensate for the loss of waters of the U.S. associated with the Applicant's Preferred Alternative. USACE will make a determination on the environmentally preferable alternative for NEPA, and the least environmentally damaging practicable alternative for compliance with the CWA Section 404(b)(1) Guidelines in the Record of Decision (ROD) for the Cordova Hills project. As described on page 2-2 of the FEIS, effects related to loss and degradation of jurisdictional wetlands and other waters of the U.S. under the Applicant's Preferred Alternative would be less than those of the Proposed Action, but would be within the range of alternatives considered in the DEIS. Impacts related to take of special-status species and loss and degradation of habitat would likewise be less, but within the range of the alternatives considered in the DEIS. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-8 *The comment states that USFWS believes the DEIS did not fully analyze impacts associated with and necessary to accommodate the Cordova Hills project, including improvements to Grant Line Road, which are unified and interdependent with the Proposed Action.*

The DEIS discloses that improvements to Grant Line Road will result in direct and indirect effects to the environment, including Federally-listed threatened and endangered species, other wildlife and plants. Detailed breakdown and maps of indirect impacts to waters from offsite road improvements are provided in Appendix A of the FEIS in the Revised Request for Preliminary Jurisdictional Determination for Offsite Road Improvements (Attachment A of the applicant revised wetland mitigation proposal). The DEIS analyzes all offsite infrastructure required by the Proposed Action, including widening of Grant Line Road up to construction of 1,800 dwelling units. As discussed on page 2-33 of the DEIS, improvements to the regional roadway network would be required by the County to contribute to off-site roadway improvements on an incremental basis. The Proposed Action would be one of a number of projects in the vicinity with obligations to make off-site roadway improvements to the regional roadway system, including Grant Line Road. In addition, these regional roadway improvements, including Grant Line Road, are included in Sacramento County's and the City of Rancho Cordova's roadway Capital Improvement Programs. Also, the Capital South East Connector has a certified EIR for Grant Line as a four lane expressway and is currently pursuing financing to construct the improvements. The City of Rancho Cordova and Sacramento County have also designated Grant Line as a four lane expressway in their General Plans and Capital Improvement Programs to be consistent with the Capital South East Connector. As such, Grant Line and other regional roadway improvements are not unified and interdependent with the proposed Cordova Hills development. Although Cordova Hills does have CEQA obligations for improving or contributing fair share funding for these regional roads and Grant Line Road, these roadway improvements will occur regardless of whether Cordova Hills develops and have a separate and independent utility from the Cordova Hills project.

Certain roadway improvements, as listed on page 2-38 of the DEIS, would be required under implementation of the Proposed Action and the effects of these improvements are analyzed in the DEIS. At this time, it is uncertain what entities would fund and build the remainder of the regional roadway improvements once the Proposed Action reaches 1,800 dwelling unit equivalents. If, at that time, no other project has permitted and constructed any of the necessary regional roadway improvements, then the project applicant would need to submit a subsequent Section 404 Permit application to build one or more of the remaining regional roadway improvements. Consequently, this EIS does not consider those future improvements as part of the Proposed Action. The comment provides no information or reasoning to conclude that the analysis provided in the DEIS is inadequate under NEPA or inconsistent with CWA Section 404(b)(1). USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-9

The comment states that potential direct and indirect effects of constructing new water pipelines and a new water storage tank on the Pilatus property were not analyzed in the DEIS.

The 11-acre site selected for the offsite water storage tank does not support waters of the U.S or any other aquatic habitats; see Exhibit 2-11. Therefore, no direct effects to waters of the U.S. or Federally-listed threatened and/or endangered species would result from constructing a storage tank in that location. However, the DEIS considered a high range of indirect impacts to vernal pool fairy shrimp and vernal pool tadpole shrimp as occurring within 250 feet from all proposed construction, including the offsite water storage tank and all project roads and trails. Therefore, the DEIS determined that project construction, including the offsite storage tank and other off-site improvements, would result in indirect effects to up to 6 acres of habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp (see page 3.4-63 of the DEIS). In the applicant's updated conceptual mitigation plan provided as Appendix A of the FEIS, off-site indirect impacts to vernal pool crustacean habitat are quantified at 2.79 acres for ¼ mile radius of the project site and indirect impacts from off-site roads are quantified at 1.69 acres for a total of 4.48 acres of off-site indirect impacts, or 1.52 acres less than the amount of off-site indirect impacts analyzed in the DEIS. The proposed off-site improvements are the same under each Action Alternative and potential direct and indirect impacts associated with the water tank are included in the analysis. A 42-inch water line already exists along Douglas Road up to the North Douglas development along Douglas Road. A new transmission line would need to be extended from the existing 42-inch line approximately 1 3/4 of a mile to the proposed new tank site. This pipeline would traverse along the frontages of other approved projects in the Sunridge Specific Plan area and therefore would not result in new, unpermitted impacts. As discussed on page 3.4-34 of the DEIS, grading and creation of impervious surfaces proposed for adjacent uplands could also adversely affect preserved and adjacent wetlands and other waters by altering hydration periods, peak flows, runoff volumes, and runoff durations. As noted on page 3.4-37 of the DEIS, many of the indirect effects cannot be quantified because they would not result in a predictable loss of acreage or a full loss of function, but if left unmitigated, they could result in diminished functional capacity of aquatic resources adjacent to, downstream from, or retained on the Cordova Hills site. However, the proposed storage tank site is adjacent to an area of the Cordova Hills site that would be developed and therefore, aquatic features located there were calculated as direct loss of habitat. The comment provides no information or reasoning to conclude that the analysis provided in the

DEIS is inadequate under NEPA or inconsistent with CWA Section 404(b)(1). USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-10 *The commenter anticipates that construction and operation of detention basins along the edges of the proposed Paseo Central Drainage Preserve will result in both direct and indirect effects to trust resources, including effects from changes in hydrology of vernal pools or ephemeral drainages that provide habitat for federally listed vernal pool species.*

The commenter is correct that direct and indirect impacts associated with development activity outside of the Paseo Central Drainage Preserve will occur, and these impacts were taken into consideration in the DEIS (pages 3.4-54 through 3.4-67). Table 3.4-10 of the DEIS identifies all aquatic habitat types within 250' of the central drainage preserve that would be indirectly impacted resulting in a conservatively estimated indirect impact of 35.28 acres at the high end. Table 3.4-10 also summarizes the anticipated direct impacts which range from a low of 21.41 acres to a high of 39.78 acres.

The proposed edge treatments, including detention basins, are designed to minimize the indirect effects of adjacent development on preserved aquatic habitats. As fully described in Section 3.10 "Hydrology and Water Quality" detention/flow duration control/water quality basins and other features have been incorporated into the design of the Proposed Action to eliminate nuisance flows into vernal pools and other waters of the U.S. within the preserves, and to maintain the hydrology of the central drainage preserve. Discharge locations have been designed such that they will not flow into existing wetlands. The basins would be designed to allow water to percolate into the water table during periods of low to moderate flow and spill into the central drainage channel during large storm events. The basins would dry within 2 to 3 days of storm events and discharges would be released below the restrictive layer to reduce potential effects to adjacent preserved wetlands.

The DEIS analyzes a range of direct and indirect effects to listed vernal pool species, which includes an analysis of indirect effects up to 250 feet from the edge of development (Page 3.4-54 through 3.4-67). Therefore, the range of potential direct and indirect effects included in the DEIS is adequate and includes the vernal pools and other wetlands within the central drainage preserve. As noted in the DEIS on page 3.4-62, "The final determination of indirect effects would be made during Section 7 consultation with FWS and would be analyzed in the Biological Opinion." USACE requested initiation of formal consultation on the Proposed Action as identified in the DEIS under Section 7 of the Endangered Species Act on December 22, 2014. On October 9, 2015, USFWS responded, determining that they have not yet received all information necessary to initiate formal consultation, and requesting additional information. USACE is working with the applicant to obtain the necessary information requested by USFWS for the initiation of formal consultation. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-11 *The comment states that impacts associated with community trails and roads, compensatory wetland creation within preserves, and grading adjacent to on-site preserves are greater than*

characterized in the DEIS and expresses concern that vernal pool habitat in the on-site preserves would likely be degraded over time due to edge effects, such as changes in hydrology, increases in erosion from runoff, trespassing, trash accumulation, vandalism, illegal dumping, invasive plant species, and effects to water quality from pesticides and fertilizers, to the point that these habitats may no longer provide suitable habitat for federally listed vernal pool species.

The DEIS takes a conservative approach and assumes in Table 3.4-10 for the Proposed Action that all vernal pool habitat within 250' of any development may be indirectly impacted. The DEIS concluded there could be up to 35.28 acres on-site and up to 6 acres off-site of indirect impacts to habitat for vernal pools species on-site from the Proposed Action, which includes indirect impacts to the plateau preserve from the construction of the proposed community trails and roads. As identified in Response to Comment USFWS-13, the applicant is no longer proposing to compensate for impacts to vernal pools through establishment within the plateau preserve.

As noted on page 3.4-34: “grading and creation of impervious surfaces proposed for adjacent uplands could also adversely affect preserved and adjacent wetlands and other waters by altering hydration periods, peak flows, runoff volumes, and runoff durations.” Potential indirect impacts from trails and roadways are addressed on page 3.4-37 of the DEIS: “The trails and roadways would increase access to preserved areas by humans and their pets, which has the potential to degrade preserved habitats through predation on wildlife by domestic animals, human disturbance/harassment, introduction and spread of invasive species, dumping of litter and debris that is harmful to wildlife, and trampling and compaction of soils and vegetation (by people venturing off designated trails and gathering in preserve areas);” and “Construction of the trails through the wetland preserve could further fragment the remaining habitat and could disrupt or eliminate hydrologic connectivity that is important to support vernal pools and the plant and wildlife species that inhabit the pools without mitigation. However, roads and trails have been located strategically along watershed/topographic breaks where possible, to minimize indirect impacts and the trails would be elevated approximately 12 to 24 inches at swale crossings using a boardwalk or truss-style bridge design as needed depending on the size of the drainage to be crossed, to minimize hydrological disruption.” Also, on page 3.4-64 of the DEIS, it is stated that although 52 percent of habitat for vernal pool branchiopods would be preserved, implementation of the Proposed Action would result in the preserved habitat being transected by roads and trails and becoming surrounded by urban development rather than other areas of suitable habitat. Thus, it is acknowledged that although preserved, the overall quality of the habitat would be reduced by edge effects at the preserved habitat-urban interface and the smaller, less connected nature of the preserved habitat. As noted on page 3.4-37 of the DEIS, if left unmitigated, indirect impacts could result in diminished functional capacity of aquatic resources adjacent to, downstream from, or retained on the Cordova Hills site. The proposed edge treatments, including detention basins, are designed to minimize the indirect effects of adjacent development on preserved aquatic habitats. Nonetheless, the DEIS acknowledges that these indirect impacts would remain potentially significant. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-12 *The comment expresses the belief that construction and operation of the two 30- to 50-foot wide trail corridors will result in impacts greater than characterized in the DEIS and that the acreage of habitat within the trail corridors should be excluded from the on-site preserves.*

The trails were designed to avoid direct impacts on waters of the U.S., including vernal pools and other wetlands that contain suitable habitat for vernal pool species. The two proposed trails crossing the main plateau preserve are aligned along watershed breaks and would not impact waters of the U.S. the proposed trails would be elevated approximately 12 to 24 inches at swale crossings to ensure the natural hydrology remains. In addition, the proposed trails will be constructed at a depth that does not puncture the hardpan. The proposed trails would also be level with the existing ground allowing sheet flow to cross over the trails. These proposed design features would minimize impacts to surface and subsurface hydrology and minimize impacts from erosion. However, even with the proposed design features, the DEIS identifies that the proposed trails could result in indirect impacts to preserved waters of the U.S. within the plateau preserve. USACE acknowledges that through the Section 7 process, habitat for vernal pool species that may be indirectly affected within the plateau preserve may not receive credit from USFWS as preserved habitat. In addition, USACE continues to coordinate with the project applicant to further avoid and minimize impacts to waters of the U.S. for compliance with the CWA Section 404(b)(1) Guidelines. USACE will make a determination regarding compliance with the CWA Section 404(b)(1) Guidelines in the ROD. Potential indirect impacts from the trails are disclosed in the DEIS (see Response to comment USFWS-11). The comment provides no information or reasoning to conclude that the analysis provided in the DEIS is inadequate under NEPA or inconsistent with CWA Section 404(b)(1). USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-13 *The comment states that construction of compensatory wetlands in the onsite preserve will result in impacts to existing hydrologic and ecological functions of both natural vernal pools and adjacent supporting uplands.*

Establishment of vernal pools in the on-site preserve was a component of the applicant's proposed mitigation plan provided in Appendix N of the DEIS. Establishment of vernal pools within on-site preserves was not an element of the Proposed Action or the Action Alternatives analyzed in the DEIS. As indicated in the updated Conceptual Mitigation Plan provided as Appendix A of the FEIS, the applicant is no longer proposing any onsite creation on the Cordova Hills site, and has now proposed all compensatory mitigation to occur offsite. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-14 *The comment expresses disagreement that the proposed 50-foot setbacks between the on-site preserve boundaries and urban development will function as a buffer to minimize indirect effects to vernal pools and vernal pool species.*

Potential indirect impacts on vernal pool habitats are already disclosed in the DEIS, which concluded there could be up to 35.28 acres of indirect impacts on-site, and 6 acres off-site. Page 3.4-61 of the DEIS states: "USFWS generally assumes that all vernal pools within 250 feet of

development may be subject to indirect effects, including reduction in water quality and altered hydrology caused by urban runoff, erosion, and siltation; intrusion of humans and domestic animals; litter and dumping; introduction of invasive plant species that could result in habitat degradation; and changes in management regimes, such as elimination of grazing and implementation of stronger fire suppression policies, that degrade current habitat values. Thus, although 52 percent of on-site habitat for vernal pool branchiopods would be preserved, some of these preserved pools on-site could be indirectly affected by adjacent development.” (See also Response to comment USFWS-11). The DEIS concludes that direct and indirect impacts on wetlands, including vernal pools, and federally listed vernal pool species are potentially significant. As required by the CWA Section 404(b)(1) Guidelines, no discharge of dredged and/or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-15 *The comment expresses agreement that indirect effects on Sacramento Orcutt grass and legenera would result from degradation of occupied habitat and states that long-term persistence of Sacramento Orcutt grass is uncertain due to proximity of the North Loop Road, which will leave the population vulnerable to gradual long-term habitat degradation and edge effects resulting from construction, operation, and maintenance of this road.*

Potential indirect impacts on vernal pool habitats are already disclosed in the DEIS (see Response to comments USFWS-11 and USFWS-14). The pools containing Sacramento Orcutt grass would have a minimum 300-foot buffer between the occupied habitat and adjacent development. However, as stated on page 3.4-64 of the DEIS, the Proposed Action involves a substantial amount of permanent loss of habitat that is suitable for this species, as well as potential habitat degradation due to indirect effects from habitat fragmentation as large expanses of habitat surrounded by other natural habitats and open space become smaller habitat patches surrounded by urban development and transected by roads and trails. The DEIS concludes on page 3.4-67 that direct and indirect effects to Federally listed species and their habitat under the Proposed Action are potentially significant. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-16 *The comment states that the project site is one of the largest areas of relatively unaltered vernal pool grasslands remaining in the Mather Core Recovery Area and that each Action alternative would result in the destruction of a sizeable portion of this valuable resource. The comment expresses the belief that the proposed mitigation for these effects may not be commensurate with the quality or quantity of affected resources.*

The DEIS identifies up to 75.06 acres of vernal pool habitat will be directly and indirectly affected by the Proposed Action (Table 3.4-10). The DEIS also acknowledges the importance of the Mather Core Area to the recovery of Sacramento Orcutt grass, vernal pool fairy shrimp, and vernal pool tadpole shrimp on pages 3.4-16 through 3.4-18 and discusses the Mather Core Area’s value as a vernal pool recovery area on page 3.4-28. On page 3.4-64, the DEIS states: “The Cordova Hills site is located mostly within the Mather Core Area, which is within the

Southeastern Sacramento Valley vernal pool region for recovery of vernal pool species (see Exhibit 3.4-11). The 52 percent preservation of habitat for vernal pool branchiopods that would occur under the Proposed Action is far less than the recovery plan goal of 85 to 95 percent preservation of all suitable wetland habitats within the Mather Core Area. Thus, the Proposed Action would result in both direct and indirect effects to occupied vernal pool habitat that is within an area considered to be necessary for the recovery of Federally listed vernal pool species.”

The Chester Drive and Shehadeh properties proposed by the project applicant as mitigation sites are located within the Mather Core Area and the Chester Drive site is adjacent and connected to an existing USFWS-approved conservation bank (Bryte Ranch) that supports vernal pool tadpole shrimp. Vernal pool tadpole shrimp have been confirmed at the Shehadeh property.

The DEIS concludes on page 3.4-67 that direct and indirect effects to Federally listed species and their habitat under the Proposed Action are considered potentially significant, because a substantial direct effect on Federally listed species would occur due to take and a large amount of habitat would be permanently removed or degraded by edge effects from adjacent development. The DEIS Mitigation Measure 3.4-2c requires the project applicant to identify mitigation acceptable to USACE, and USFWS for the effects to vernal pools and other seasonal wetland habitats that support or potentially support Federally listed vernal pool invertebrates in such a manner that there will be no net loss of habitat and to compensate for loss of habitat. The applicant proposed Cordova Hills Conceptual Mitigation Plan in the FEIS reduces impacts to Mather Core Vernal Pools from 17.276 acres to 14.346 acres (see Table 7 of FEIS Conceptual Mitigation Plan) while providing 16.57 acres of Mather Core Vernal Pool compensatory mitigation. As stated on page 3.4-68 of the DEIS, the project applicant shall preserve acreage of suitable vernal pool fairy shrimp and vernal pool tadpole shrimp habitat for each wetted acre of any indirectly affected suitable habitat at a ratio approved by USFWS in the Biological Opinion. This mitigation shall occur before the commencement of any construction activities that may adversely affect listed species, as determined by USFWS in the Biological Opinion. If USFWS determines the applicant proposed mitigation is not commensurate with the quality or quantity of the affected resources, it may require additional compensatory mitigation in the biological opinion. However; the commenter provides no information to support the opinion that impacts to Federally listed species and their habitat would be greater than was characterized in the DEIS. The DEIS acknowledges that the final determination of impacts to Federally listed species and their habitat will be contained in the Biological Opinion, however, based on currently available information, USACE believes the analysis in the DEIS is accurate.

USFWS-17 *The comment states that USFWS has not fully reviewed the watershed analysis conducted by ECORP to the watershed size necessary to sustain normal hydrologic function of seasonal wetlands and vernal pools on the Cordova Hills site and therefore does not agree with the conclusions, based on that report, that only 1.3 or 1.4 acres of upland watershed are needed to maintain normal hydrologic functions or that only 0.032 acres of vernal pools within the onsite preserves could be indirectly affected by adjacent development and community trails.*

While not a cooperating agency on the EIS, between 2011 and 2013, USFWS attended a variety of meetings with USACE, cooperating agencies, and the applicant on the DEIS and proposed project. USFWS was provided the most recent copy of the watershed analysis in 2013, which was prepared based on questions and comments provided by USFWS and other agencies in 2011 and 2012. The DEIS takes a conservative approach and assumes in Table 3.4-10 for the Proposed Action that all habitat resources within 250' of project development may be indirectly impacted. The DEIS concluded there could be up to 35.28 acres of indirect impacts from the Proposed Action, which includes indirect impacts to the plateau preserve. The DEIS Table 3.4-10 estimated a high range of indirect impacts for each Action Alternative. See response to comments USFWS-9 through USFWS-12. The DEIS references the watershed analysis as evidence supporting the idea that the preserve design maintains a high degree of hydrological integrity to the wetlands retained therein; however, the DEIS does not identify that only 0.032 acres of vernal pools could be indirectly affected by the Proposed Action or Action Alternatives (Chapter 3.4 Biological Resources). USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-18 *The comment states that USFWS does not agree that the analysis provided in Appendix M of the DEIS supports refinement of the Mather Core Area boundary or that there is any evidence the authors of the 2005 vernal pool recovery plan may have intended for the eastern edge of the plateau preserve to serve as the boundary of the Mather Core Area.*

The DEIS does not identify that the Mather Core Area boundary should be refined. Appendix M was provided by the project applicant and was included in the DEIS for review and comment. The DEIS cites language in USFWS' 2005 vernal pool recovery plan stating that core area boundaries may be refined by USFWS based on site-specific data on the distribution of suitable habitat and species occurrences (USFWS 2005:IV-2). USACE understands that USFWS may determine that there is not sufficient information to support a determination that the boundary of the Mather Core Recovery Area should be refined. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-19 *The comment states that USFWS does not agree with the assumption that if listed crustacean species are not found during protocol surveys, then Ricksecker's scavenger beetle may also be presumed absent and no further mitigation shall be required for listed vernal pool invertebrates.*

This language is specific to a mitigation measure imposed through CEQA EIR certification and project approval process, which is included as part of the proposed action and other alternatives, and is not a USACE measure. Ricksecker's water scavenger beetle is not a Federally listed species and does not meet the definition of a special-status species as provided on page 3.4-2 of the DEIS. As identified in Mitigation Measure 3.4-2c of the DEIS, the project applicant must compensate for loss of Federally listed species habitat as approved by USFWS in the biological opinion. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-20 *The comment states that USFWS does not agree that the project proponent needs to prepare a pesticide and pollution prevention plan only when construction activities encroach within 250-*

feet of vernal pools known to support Sacramento Orcutt grass as pesticides and pollutants are also harmful to other vernal pool biota.

This language is specific to a mitigation measure imposed through CEQA EIR certification and project approval process, which is included as part of the proposed action and other alternatives, and is not a USACE measure. CEQA EIR Mitigation Measure BR-7, included as part of the proposed action and other alternatives, requires the project applicants to obtain all applicable permits from USFWS and mitigate for habitat loss in accordance with the Biological Opinion. Mitigation Measures 3.10-1, 3.4-1a, 3.4-1b, 3.4-2a, 3.4-2b, 3.4-2c, and 3.4-2d require additional measures be implemented to protect vernal pool habitat retained onsite, including implementing BMPs, monitoring and adaptive management, and water quality protection measures. As identified in the DEIS, with the incorporation of all measures from the Sacramento County certified EIR, and the implementation of other mitigation measures identified in the DEIS, the impacts are still potentially significant. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-21 *The comment recommends that USACE revise or supplement the DEIS to clarify the content and description of each Action Alternative, including the Proposed Action, so that all elements of each alternative are the same in all Chapters, Section, and Appendices.*

See responses to comments USFWS-6 and USFWS-7. The DEIS is consistent in the evaluation of the Proposed Action. Appendix N identifies the Modified Proposed Action Alternative, which is identified in the FEIS as the Applicant's Preferred Alternative. USACE has determined that the Modified Proposed Action alternative does not necessitate a supplemental DEIS because effects related to loss and degradation of jurisdictional wetlands and other waters of the U.S. under the Modified Proposed Action, as well as other environmental effects, would be less than those of the Proposed Action, but would be within the range of alternatives considered in the DEIS. Impacts related to take of special-status species and loss and degradation of habitat would likewise be less, but within the range of the alternatives considered in the DEIS. Additionally, the Applicant's Preferred Alternative does not increase the intensity or severity of environmental impacts evaluated in the DEIS. For example, the DEIS analyzed alternatives with impacts ranging from 9.38 acres of jurisdictional waters of the U.S. to 39.79 acres (See Chapters 2 and 3). The scope and impacts of the Applicant's Preferred Alternative falls within the scope and level of impacts represented by the various DEIS alternatives. On that basis, USACE has determined that the Applicant's Preferred Alternative does not result in substantial changes in the Proposed Action that are relevant to environmental concerns. It does not result in new significant circumstances or information relevant to environmental concerns and bearing on the Proposed Action or its impacts, and therefore a supplemental DEIS is not necessary. Chapter 2 of this FEIS (Section 2.4) provides a qualitative summary of the impacts of the Applicant's Preferred Alternative. USACE has reviewed the DEIS and has not found any inconsistencies in the Proposed Action or alternatives as described throughout the DEIS. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-22 *The comment recommends that USACE revise or supplement the DEIS to fully describe the impacts of activities interrelated and interdependent with Cordova Hills development described*

in the Proposed Action and in each Action Alternative, including improvements to Grant Line Road, all offsite facilities on the Pilatus property, and detention basins in the central drainage preserve.

See responses to comments USFWS-8, USFWS-9, and USFWS-10. The DEIS describes and provides analysis of impacts associated with reasonably foreseeable actions interrelated to the Proposed Action and Action Alternatives. The DEIS assumes there would be indirect impacts to all habitat within up to 250-feet from development, which includes all of the detention basins along the central drainage preserve, and the proposed off-site water tank on the Pilatus property. No detention basins are proposed in the central drainage preserve but only in the edge treatment areas adjacent to the preserve. Mitigation Measures 3.10-1, 3.4-1a, 3.4-1b, 3.4-2a, 3.4-2b, 3.4-2c, and 3.4-2d require additional measures be implemented to protect vernal pool habitat retained onsite, including implementing BMPs, monitoring and adaptive management, and water quality protection measures. The comment provides no information or reasoning to conclude that the analysis provided in the DEIS is inadequate under NEPA or inconsistent with CWA Section 404(b)(1).

USFWS-23 *The comment recommends that the DEIS address the proposed footprint and potential impacts of community trails crossing the onsite preserves in a manner similar to the proposed roadway crossings and revise Figure 2-8 accordingly.*

See response to comment USFWS-11. The trails are already shown on Exhibit 2-8 of the DEIS.

USFWS-24 *The comment recommends that the DEIS address the long-term (50+ years) effects of the trails and roadway crossings on biological and physical functions of vernal pool grasslands and interdependent species. The comment further states that USFWS may determine that it is not biologically appropriate to utilize vernal pools within close proximity to trails, roadways, or new urban areas as compensation for adverse effects to vernal pool species.*

See responses to comments USFWS-8 and USFWS-11. As identified in the DEIS, the proposed trails and roadways may have adverse indirect effects on the waters of the U.S. within the plateau preserve under the Proposed Action and other alternatives analyzed in the DEIS. In addition, as identified in Chapter 2 of the FEIS, trails and roadways proposed under the Applicant's Preferred Alternative would have similar indirect effects to waters of the U.S. within the plateau preserve. The comment by USFWS that it may not be appropriate to utilize preserve vernal pools within close proximity to trails, roadways, or urban areas as compensation for adverse effects to vernal pool species is noted.

USFWS-25 *The comment expresses the belief that the stated purposes and needs identified in the DEIS can be achieved by an alternative that does not include trails constructed through the onsite preserves, therefore, the comment recommends that USACE revise or supplement the DEIS with a new Proposed Action and additional Action Alternatives that: (1) do not include community trails in the onsite preserves, (2) do not include vernal pool creation in the onsite preserves, and (3) include wider setbacks/buffers between the proposed onsite preserves and the deep grading and disturbances caused by urban development and construction.*

See response to comment USFWS-11. As identified in the DEIS, USACE assumes indirect impacts will result from construction and use of the trails in the preserve areas. The applicant is no longer proposing to create vernal pools in the proposed onsite preserves. The buffers will be 50-100 feet wide or more along most of the on-site preserve edges, and include very low-intensive land uses and swales in an effort to eliminate nuisance flow. The project applicant worked with USFWS and local vernal pool expert Carol Witham of the California Native Plant Society to design buffers that would minimize edge effects to vernal pool habitat and listed species within the preserves. The commenter does not provide any citations or other information indicating what alternative buffers or setbacks would be appropriate to adequately protect resources retained within the onsite preserves. USACE must decide whether or not it is practicable for the project applicant to further avoid and minimize impacts to waters of the U.S. If trail construction in the onsite preserves were eliminated from the Proposed Action, then impacts to Federally listed species and waters of the U.S would be less than what is currently analyzed in the DEIS, which would not be expected to require a supplemental EIS. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-26 *The comment states that indirect effects to existing vernal pools resulting from vernal pool creation would need to be offset and that USFWS recommends compensatory wetland mitigation be constructed on degraded landscapes that formerly supported vernal pools rather than in uplands between currently functioning vernal pools.*

The comment is noted. The project applicant no longer proposes wetland creation in the onsite preserves as part of the wetland mitigation plan. USACE concurs with the comments by USFWS that re-establishment of vernal pools in landscapes that formerly supported vernal pools is preferable to constructing vernal pools within existing vernal pool landscapes. USACE is required to evaluate any proposed compensatory mitigation plans proposed by the applicant and determine if the proposed compensatory mitigation site is appropriate, if the proposed compensatory mitigation type is appropriate, and to determine if the proposed compensatory mitigation is sufficient to compensate for the loss of waters of the U.S. associated with the Proposed Action. A determination on the amount, type, and location of required compensatory mitigation necessary to compensate for the loss of waters of the U.S. will be made in the ROD.

USFWS-27 *The comment recommends that the Proposed Action and other Alternatives incorporate additional design measures to reduce edge effects to vernal pool preserves, such as single-loaded streets, locating open space and passive recreation adjacent to onsite preserves, larger or more effective buffers and setbacks, and eliminating the community trails through the preserves.*

See responses to comments USFWS-10, USFWS-11, USFWS-12, and USFWS-25. Edge treatments described in the applicant's conceptual mitigation (Appendix N of the DEIS) already included single-loaded streets, open space and passive recreation adjacent to onsite preserves, and enhanced buffers and setbacks with native vegetation. These edge conditions have been carried over to the applicant's revised conceptual mitigation plan, provided in Appendix A of the FEIS. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-28

The comment states that additional action alternatives that include the Pilatus site, specifically relocating the North Loop Road to the Pilatus site, should be rigorously explored and objectively evaluated by USACE in a revised DEIS because the commenter believes relocating the North Loop Road to the Pilatus site would better protect and conserve the endangered Sacramento Orcutt grass.

The DEIS analyzes four action alternatives at an equal level of detail to the Proposed Project analysis as required under NEPA. The Pilatus Alternative is fully described beginning on pages 2-88 through 2-90 of the DEIS and potential effects to biological resources from this alternative are evaluated beginning on page 3.4-48. As described in the DEIS, implementing the Pilatus Alternative would increase the size of the plateau preserve by approximately 36 acres and result in 7.90 fewer acres of waters of the U.S. being filled; however, approximately 1.50 more acres of vernal pools and seasonal wetlands would be filled and a larger area would be developed. The larger development footprint under the Pilatus Alternative would result in greater wetland habitat fragmentation and greater potential for indirect effects on a larger landscape level as development would be spread over a larger landscape area and more wetland habitat that is currently surrounded by open space would become surrounded by development. The currently proposed alignment of the North Loop Road was selected along a watershed break. Hydrology in the vernal pool containing the northern Orcutt grass occurrence (north of the proposed North Loop Road) flows to the north-east, eventually draining into the central drainage on the Pilatus property. Hydrology in the vernal pool containing the southern Orcutt grass occurrence (south of the proposed North Loop Road), flows south-west across the plateau preserve, eventually draining into Laguna Creek offsite. As a result of the comment from USFWS, USACE requested that the applicant provide information regarding alternative alignments for North Loop Road. The applicant provided a memo dated December 1, 2015, containing an analysis of alternative alignments of the North Loop Road and this memo is located in Appendix B of the FEIS. In the memo, the applicant evaluated realignment of North Loop Road to the existing Glory Lane from the proposed North Loop road access point, elimination of North Loop Road, and extension of Douglas Boulevard to the north, and realignment of North Loop Road along Glory Lane from the existing Glory Lane access point. The proposed alignment of North Loop Road would result in the loss of approximately 0.97 acres of waters of the U.S., including 0.84 acres of vernal pools, 0.07 acres of seasonal wetlands, and 0.06 acres of seasonal wetland swales. Based on the information submitted by the applicant, the other alignments provided by the applicant would result in the loss of 2.55, 2.27, and 2.48 acres of waters of the U.S. In addition, each of these alternate alignments would result in the loss of a greater acreage of vernal pools than the proposed alignment of North Loop Road. Because these alternate alignments of North Loop Road would result in more loss of waters of the U.S. and vernal pools than the proposed alignment, USACE has determined that it is not appropriate to evaluate these alternatives in the EIS. Therefore, USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment, except to append the alternative North Loop Road alignment analysis to the FEIS.

USFWS-29

The comment recommends that it is more biologically appropriate to preserve greater acreage of higher-quality vernal pool grassland than to offset the loss of high-quality vernal pool habitat that would result from the Proposed Action and Action Alternatives and that additional

assurances are needed that the proposed mitigation would adequately offset direct and indirect impacts to vernal pool grassland habitat and Federally listed species.

USACE concurs with the statement made by USFWS that it is more biologically appropriate to preserve greater acreage of vernal pools than to offset the loss with compensatory mitigation. Per the CWA Section 404(b)(1) Guidelines, no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. Because the applicant is proposing to discharge dredged and/or fill material into special aquatic sites (i.e. wetlands), and because the proposed activity does not require access or proximity to or sighting within the special aquatic sites to fulfill its basic purpose, practicable alternatives are presumed to be available, unless clearly demonstrated otherwise. In addition, where the discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impacts on the aquatic ecosystem, unless clearly demonstrated otherwise. Throughout the EIS and permit application process, USACE has been coordinating with the applicant on the evaluation of alternatives to the proposed action. As a result of the coordination, the applicant has modified the Proposed Action to reduce impacts to waters of the U.S. on the Cordova Hills site. The Modified Proposed Action is identified in the FEIS as the Applicant's Preferred Alternative. USACE will make a determination in the ROD on whether the Applicant's Preferred Alternative meets the requirements of the Section 404(b)(1) Guidelines. If it is determined by USACE in the ROD that the Applicant's Preferred Alternative does not meet the requirements of the CWA Section 404(b)(1) Guidelines, or is contrary to the public interest, no permit will be issued. USACE has also been coordinating with the applicant on their proposed compensatory mitigation plan, and is awaiting the submittal of a Draft Mitigation and Monitoring Plan (MMP) and Long Term Management Plan (LTMP) for review and comment. In evaluating a Draft MMP and LTMP, USACE will consider the appropriateness of the amount, type, and location of any proposed compensatory mitigation. Per the CWA Section 404(b)(1) Guidelines, no permit shall be issued unless all appropriate and practicable steps have been taken to minimize adverse effects to the aquatic environment. In addition, if there is a lack of appropriate and practicable compensatory mitigation, USACE may deny the permit.

USFWS-30 *The comment states that the Proposed Action would result in the loss of substantial acreage of vernal pool habitat within the Mather Core Area and recommends that any offsite preserves be located in the Mather Core Area, but notes that the proposed Carson Creek mitigation site is not within the Mather Core Area.*

See response to comment USFWS-16 and USEPA 24. On January 25, 2011, USACE issued a ROD for the EIS for the Sunridge Specific Plan. Finding e of this ROD states the following:

The Corps recognizes the significant cumulative loss of vernal pool wetlands within the Mather Core Recovery Area. For future unavoidable impacts to vernal pool wetlands within the Mather Core Recovery Area, including those associated with the Arista del Sol project, compensatory mitigation shall be:

- 1) based on a method for assessing the functions of all waters of the U.S. on the project site;
- 2) accomplished at a ratio of greater than 1:1, after considering direct and indirect impacts, temporal loss and difficulties creating vernal pool wetlands; and
- 3) located in the Mather Core Recovery Area, unless determined impracticable or inappropriate by the Corps

USACE has been coordinating with the applicant regarding compensatory mitigation requirements for the loss of waters of the U.S. associated with the Applicant's Preferred Alternative, and in identifying compensatory mitigation options available for the loss of vernal pools in the Mather Core Recovery Area. The applicant's revised conceptual mitigation plan, provided in Appendix A of the FEIS, proposes mitigation for direct and indirect impacts to vernal pools in the Mather Core Recovery Area through the preservation of 27.73 acres of vernal pools onsite, 13.35 acres of vernal pool on the Chester Drive site (located in the Mather Core Recovery Area), 8.6 acres of vernal pools on the Shehadeh site (located in the Mather Core Recovery Area), and 1.78 acres of vernal pools at the Gill Ranch site. In addition, the applicant is proposing to conduct permittee responsible establishment and/or re-establishment of 1.78 acres of vernal pools on the Chester Drive site and 14.79 acres of vernal pools on the Shehadeh site, purchase 4.90 floodplain riparian establishment credits and 24.66 floodplain mosaic establishment credits from the Cosumnes Floodplain Mitigation Bank, and purchase 7.12 vernal pool establishment credits from the Toad Hill Mitigation Bank. The applicant is no longer proposing permittee responsible establishment or re-establishment onsite or at the Carson Creek property as compensatory mitigation for the loss of waters of the U.S. or habitat for vernal pool species.

USFWS-31 *The comment states that the presence of vernal pool fairy shrimp on the Shehadeh and Chester Drive properties is necessary to ensure the appropriateness of using these sites to offset losses to this species.*

The DEIS Mitigation Measure 3.4-2c requires the project applicant to identify mitigation acceptable to USACE, and USFWS for the effects to vernal pools and other seasonal wetland habitats that support or potentially support Federally listed vernal pool invertebrates in such a manner that there will be no net loss of habitat and to compensate for loss of habitat within the Mather Core Area. Vernal pool tadpole shrimp were found on both the Shehadeh and Chester sites and vernal pool fairy shrimp have high potential to occur because the Chester Drive property is contiguous with the Bryte Ranch Mitigation Bank, which is known to support vernal pool fairy shrimp, and cysts of *Branchinecta* sp. were found in soil samples on the Shehadeh property. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-32 *The comment states that USFWS has identified the Expanded Drainage Preservation Alternative as the one that will best promote the national environmental policy expressed in NEPA's Section 101.*

The comment is noted. See response to comment USFWS-29 and USEPA-2. USACE has determined that no revised or additional analysis is necessary in the FEIS as a result of this comment.

USFWS-33 *The comment states that the DEIS is not complete in its analysis of potential impacts to fish and wildlife resources and potential controversy exists as to the environmental consequences of the Proposed Action and alternatives and recommends USACE prepare and recirculate a revised DEIS.*

The comment provides no information or reasoning to conclude that the analysis provided in the DEIS is inadequate under NEPA. See response to comment USFWS-21.

USFWS-34 *The comment states that the DEIS is not suitable for use as a Biological Assessment for the purposes of an Endangered Species Act Section 7 consultation.*

The comment is noted. USACE has not proposed that the DEIS should be used as the Biological Assessment. USFWS has been provided with a Biological Assessment and updated Biological Assessment dated December 22, 2014, separate from the DEIS, as part of the consultation process.

USFWS-35 *The comment lists additional documents USFWS would need to review and approve for each of the four proposed preserves.*

The comment is noted.



County of Sacramento

January 12, 2015

Lisa M. Gibson, Regulatory Permit Specialist
1325 J Street, Room 1350
Sacramento, California 95814
Lisa.M.Gibson2@usace.army.mil

**SUBJECT: COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)
FOR THE CORDOVA HILLS PROJECT.**

Dear Ms. Gibson:

The Sacramento County Department of Transportation has received the Notice of Availability for the above referenced DEIS. We have following comments to offer:

1. Table 2-8, (page 94 of the pdf). Please note that the condition of approval number 61 referenced in this table was revised in the final hearing at the Board of Supervisors (BOS). BOS ordinance states that this mitigation measure should be constructed prior to 500 dwelling units. The condition of approval number 61 was renumbered to 55 in the BOS ordinance. Also, this will affect condition of approval from 55 to 60 and they should be renumbered. A copy of the BOS ordinance can be found at <http://www.per.saccounty.net/PlansandProjectsIn-Progress/Documents/Growth%20Area%20Plans/Cordova%20Hills/Cordova%20Hills%20SPA%20Ordinance.pdf> Please match the conditions numbers as per this ordinance to avoid any confusion.
2. Section 3.4.7, Biological Resources, Environmental Consequences and Mitigation Measures. The document states that the "avoided areas" would have a minimum 50-foot wide buffer area between the avoided area boundary and the adjacent development. The minimum 50-foot buffer should also be considered between the avoided area boundary and the future right-of-way line/interchange reservation areas for Grant Line Road. The boundary line of the "avoided areas", the buffer area, and any establishment of a permanent conservation easement should be located outside of the right-of-way line and interchange reservation areas for Grant Line Road and should not encumber the future use of the right-of-way for Grant Line Road. The Cordova Hills development has dedicated a 110' right-of-way along the western portion of the Cordova Hills project for Grant Line Road. At the Grant Line Road intersections with University Boulevard and Chrysanthy Boulevard an additional reservation area for future urban interchanges has also been dedicated. This comment applies to the Proposed Action and the various Alternatives.

SACDOT-1

SACDOT-2

Comments on DEIS for Cordova Hills project.

Page 2

3. General. We will ask that the project proponent take into account footprint required for the interim the mitigation measures along Grant Line Road and project access points.
4. General. Please note that the Capital SouthEast Connector JPA calls for the multiuse trail on the west side of Grant Line Road. Please work with the Capital SouthEast Connector staff to resolve this inconsistency.
5. Please refer to the comments from Capital SouthEast Connector JPA staff for this DEIS.

SACDOT-3
SACDOT-4
SACDOT-5

If you have any questions please call me at (916) 875-2844.

Sincerely,



Kamal Atwal, P.E.
Associate Transportation Engineer
Department of Transportation

KA/mp

Cc: Matt Darrow, DOT
Dean Blank, DOT
Derek Minnema, Capital SouthEast Connector JPA
Juliette Robinson, Department of Community Development
Mark Hansen, SBM
Cathy Hack, PER

SACDOT-1 *The comment requests a change to the numbering of a condition of approval referenced on Table 2-8.*

The reference to the specific condition of approval has been edited as requested. Please refer to Chapter 4, "Errata," which identifies the proposed change to Table 2-8.

SACDOT-2 *The commenter requests that boundary lines for avoided areas, buffer areas, and permanent conservation easements be located outside the 110-foot right-of-way along Grant Line Road, and outside the additional right-of-way granted at the intersections with University Boulevard and Chrysanthy Boulevard in the Proposed Action and all alternatives.*

The referenced easements, avoided areas, and buffer areas are excluded from the right-of-way for Grant Line Road, including at intersections. Please refer to Exhibit 2-1 in Chapter 2, "Modified Proposed Action," which illustrates the interchange reserve.

SACDOT-3 *The commenter requests that the project proponent consider the footprint requested for interim mitigation measures along Grant Line Road and project access points.*

The footprint required for all roadway improvements, including interim improvements, is included in the disturbed area analyzed in the DEIS. No change to the text of the DEIS is required in response to this comment.

SACDOT-4 *The commenter notes that a multiuse trail is planned for the west side of Grant Line Road as part of the Capital SouthEast Connector, and asks that the DEIS resolve this inconsistency.*

The Proposed Action and the Alternatives do not include changes to the west side of Grant Line Road that would preclude the construction of the multiuse trail. No change to the DEIS is required in response to this comment.

SACDOT-5 *The commenter requests that USACE refer to the comments on the DEIS from the Capital SouthEast Connector Joint Powers Authority (JPA).*

USACE received comments from the Capital SouthEast Connector JPA concerning the Cordova Hills EIS on February 26, 2015. Please refer to the responses to comments CSECJPA-1 through CSECJPA-5. No change to the DEIS is required in response to this comment.

California Native Plant Society

CNPS

January 12, 2015

Lisa Gibson
U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch
1325 J Street, Room 1350
Sacramento, CA 95814-2922
E-mail: Lisa.M.Gibson2@usace.army.mil

VIA EMAIL

Subject: Draft Environmental Impact Statement
Cordova Hills Project
Public Notice SPK-2004-00116, Cordova Hills DEIS

Dear Ms. Gibson,

The California Native Plant Society submitted letters regarding the Notice of Intent (NOI) for this project. We hereby incorporate the comments contained within those letters, and the statements of the California Native Plant Society's long-time interest in projects that affect vernal pools, as part of this response to the Draft Environmental Impact Statement (DEIS) for the Cordova Hills Project. We also hereby incorporate the NOI and DEIS comments of the Environmental Council of Sacramento and the Motherlode Chapter of the Sierra Club.

CNPS-1
CNPS-2

Procedural Comments

The Public Notice for SPK-2004-00116, Cordova Hills DEIS specified a comment period ending on January 12, 2015. However, the DEIS itself specifies a comment period which ends on January 14, 2015. For the purposes of legal standing, all comments received by January 14, 2015 shall be considered. Additionally, the USACE should consider accepting additional comments until the Final Environmental Impact Statement (FEIS) is in final preparation stages.

CNPS-3

In preparation of the FEIS, the California Native Plant Society requests that changes between the draft and final be appropriately annotated in some method of track changes. We would suggest strike-out for text removed and bold-underlined for text added. This will aid concerned citizens in determining exactly what has changed between versions. Given that the DEIS alone is 755 pages, it is disingenuous to expect interested parties to have to review the entire FEIS against the DEIS, in order to determine whether and what changes have been made.

CNPS-4

Appendix N. Project Description, and Environmental Impacts Analyses

While the California Native Plant Society appreciates the inclusion of the "conceptual mitigation plan" for public review, we do not see that the DEIS has adequately considered the environmental impacts of implementing such a plan. Specifically, where are the environmental analyses of the affected environment with respect to the mitigation plan? Where have you assessed direct, indirect and cumulative effects of the mitigation plan for aesthetics, agricultural resources and land use, air quality, biological resources, greenhouse gas emissions, cultural resources, hazardous waste, hydrology and water quality, noise, traffic, etc.? Where are the Best Management Practices (BMPs) and additional mitigation measures related to the mitigation plan? Creation of ~33 acres of compensatory mitigation wetlands is not without environmental consequences to the mitigation sites and their immediate environment. We believe that the compensatory mitigation is an integral part of the overall development plan and should be analyzed as such. Yet the document seems to defer the final mitigation plan and analysis of its impacts to some future date, sequestered within agency approval processes, and not subject to public review and comment.

CNPS-5
CNPS-6
CNPS-7
CNPS-8
CNPS-9



Dedicated to the preservation of California native flora

Appendix N also has severe shortcomings regarding whether or not it will actually mitigate for loss of wetlands on the Cordova Hills project site. The plan appears to propose restoration and/or creation on sites which already contain vernal pool resources. The California Native Plant Society has long considered disturbance of existing vernal pool grasslands as impact and not enhancement. Again, where are the BMPs and additional mitigation measures related to the mitigation plan? How will the mitigation plan ensure that the preexisting vernal pool habitats are not irreparably damaged by the restoration and creation efforts? How will the mitigation plan ensure that disturbed areas are not overtaken by invasive species?

CNPS-10
CNPS-11
CNPS-12
CNPS-13
CNPS-14

Mitigation Ratios

Perhaps I am simply confused by the tables in the DEIS and the proposed "compensatory mitigation plan" of Appendix N, but it appears that the project is proposing 32.84 acres of compensatory wetland creation/restoration for the 39.79 acres of on-site take and 0.36 acres of off-site improvements. This is a mitigation ratio of only 0.82:1. And this ratio does not consider temporal losses of wetland function nor potential impacts to existing vernal pools on the mitigation sites. What extenuating factors are the USACE considering when allowing less than 1:1 mitigation? How will these numbers be justified to the local land use authorities?

CNPS-15
CNPS-16
CNPS-17
CNPS-18

Mitigation Measures contained in Section 3

Many of the mitigation measures contained in the Biological Resources Section rely upon implementation of a mitigation plan. Assessment of impacts to some resources are occasionally categorized as less than significant with mitigation, but the final details of the proposed mitigation are not available at this time. It is impossible for even the most informed reviewer to determine whether or not the as-yet-to-be-determined mitigation is adequate and feasible. It would be more honest to list the impacts as "significant" even given the project proponent's proposal to develop a mitigation plan. Lack of definitive and measurable mitigation measures also constitutes deferral of mitigation. It is not adequate to say that the as-yet-to-be-developed plans will meet with agency approval.

CNPS-19
CNPS-20
CNPS-21
CNPS-22

Lack of Designative a Preferred Alternative

The California Native Plant Society is disappointed that the DEIS did not identify an environmentally preferred alternative. We would offer that the Expanded Preserve alternative is least environmentally damaging from both a wetlands and endangered species perspective. The Expanded Drainage Preserve alternative also reduces impacts to wetlands, but is not as beneficial to endangered species.

CNPS-23
CNPS-24
CNPS-25

Summary

On behalf of CNPS, I appreciate the opportunity to comment on this DEIS. Please keep me informed of activities related to projects in this area that might impact vernal pool grasslands and endangered species habitat.

CNPS-26

Sincerely,



Carol W. Witham
1141 37th Street
Sacramento CA 95816
(916) 452-5440
cwitham@ncal.net

- CNPS-1 *The comment indicates that the California Native Plant Society (CNPS) submitted letters regarding the NOI for this project and incorporate comments contained within those letters and the statements of CNPS's long-time interest in projects that affect vernal pools.*
- USACE acknowledges receipt of the CNPS letter responding to the NOI and considered those comments in preparing the DEIS. The Comment does not identify any specific environmental issues related to analysis presented in the DEIS.
- CNPS-2 *The comment states that CNPS also incorporates the NOI and DEIS comments of the Environmental Council of Sacramento and the Motherlode Chapter of the Sierra Club.*
- USACE did not receive comments from the Environmental Council of Sacramento or the Motherlode Chapter of the Sierra Club on either the NOI or the DEIS. The comment does not identify any specific environmental issues related to analysis presented in the DEIS.
- CNPS-3 *The comment identifies two dates for the end of the comment period, from the public notice and the Draft EIS, and states that the later date (January 14, 2015) should be used.*
- The FEIS includes responses to all comments received prior to its publication.
- CNPS-4 *The comment requests that changes between the DEIS and FEIS be annotated in a track-changes format.*
- Changes to the DEIS are provided in a tracked format in Chapter 4, "Errata," of this FEIS.
- CNPS-5 *The comment indicates that while CNPS appreciates inclusion of the conceptual mitigation plan for public review, they do not see that the DEIS has adequately considered the environmental impacts of implementing such a plan.*
- The project applicant's conceptual wetland mitigation plan has not been approved by USACE. The DEIS concludes on page 3.4-31 that direct and indirect effects on waters of the U.S. would remain significant and unavoidable because a determination cannot be made on whether the proposed compensatory mitigation would reduce these direct and indirect effects to a less than significant level. As shown in Chapter 4, "Errata," text has been added to the impact analysis on page 3.4-42 in response to this comment. The added text specifies that the wetland creation proposed under the applicant's conceptual mitigation plan could result in adverse effects to existing wetlands at the proposed mitigation sites.
- CNPS-6 *The comment asks where the DEIS addresses direct, indirect, and cumulative effects of the mitigation plan for aesthetics, agricultural resources and land use, air quality, biological resources, and other resource topics.*

The project applicant's conceptual mitigation plan was provided for disclosure purposes as Appendix N of the DEIS. This conceptual mitigation plan has not been approved by USACE and is subject to review and approval by the appropriate regulatory agencies. A revised wetland mitigation proposal, prepared by the project applicant, is being released for public review simultaneously with the FEIS as Appendix A. Because USACE had not had an opportunity to thoroughly analyze the conceptual mitigation plan prior to circulation of the DEIR, and has not received a Draft Wetland Mitigation and Monitoring Plan, an analysis of the proposed compensatory mitigation could not be provided in the DEIS. The applicant's revised mitigation proposal has since been completed and is being made available for public review simultaneous to the FEIS. In determining whether proposed compensatory mitigation is appropriate, USACE will consider the direct and indirect effects of the compensatory mitigation on the human environment. After a Draft Mitigation and Monitoring Plan is submitted to USACE, USACE will determine if additional NEPA analysis would be required for any proposed compensatory mitigation.

CNPS-7 *The comment asks where the BMPs and other mitigation measures related to the conceptual mitigation plan are found.*

The project applicant's conceptual mitigation plan provided as Appendix N of the DEIS includes BMPs, monitoring protocols, performance success criteria, analyses of topography and catchment basins, soils, and hydrology to demonstrate the feasibility of creating wetlands without adversely affecting existing wetlands (in particular, see Attachments B and C to the conceptual mitigation plan). A revised wetland mitigation proposal, prepared by the project applicant, is being released for public review simultaneously with the FEIS as Appendix A.

CNPS-8 *The comment states that creation of 33 acres of compensatory mitigation wetlands is not without environmental consequences to the mitigation sites and their immediate environment and asserts that compensatory mitigation is an integral part of the overall development of the plan and should be analyzed as such.*

The commenter's statement is correct that creation of 33 acres of compensatory wetlands could have adverse effects to existing wetlands, although the commenter has not provided any substantial evidence that the conceptual mitigation plan would have any significant environmental effects. Vernal pool creation would not be permitted by USACE unless it can be demonstrated that the proposed creation sites are suitable to sustain created wetlands without adversely affecting existing wetlands. The project applicant's conceptual wetland mitigation plan has not been approved by USACE. The DEIS concludes on page 3.4-31 that direct and indirect effects on waters of the U.S. would remain potentially significant and unavoidable because a determination cannot be made on whether the proposed compensatory mitigation would reduce these direct and indirect effects to a less-than-significant level. As shown in Chapter 4, "Errata," text has been added to the impact analysis on page 3.4-41 in response to this comment. The added text specifies that the wetland creation proposed under the applicant's conceptual mitigation plan could result in adverse effects to existing wetlands at the proposed mitigation sites. Environmental effects of any required compensatory mitigation will be evaluated separately from the proposed development project.

CNPS-9 *The comment states that the DEIS seems to defer the final mitigation plan to some future date sequestered within agency approval processes not subject to public review.*

The mitigation measures discussed in Section 3.4, “Biological Resources,” of the DEIS are detailed and provide specific performance standards and monitoring, reporting, and other requirements for mitigation of impacts to wetlands and Federally listed species. The wetland mitigation plan is by necessity a draft as the DEIS was being prepared, as the NEPA process must be completed prior to approving permits (and associated mitigation plans). Providing the project applicant’s conceptual mitigation plan with the DEIS allows the public to comment on the proposed plan, whereas the public would not be allowed to provide input on an already approved plan. The DEIS follows standard NEPA procedures in disclosing impacts on biological resources and providing mitigation measures that the project applicant would be required to implement following approval of the EIS and issuance of a ROD for the EIS. The wetland mitigation monitoring plan (MMP) provided as Appendix N was the project applicant’s proposed plan for mitigating wetland impacts for the purpose of obtaining a Section 404 permit from USACE at the time of the DEIS’s release. A revised wetland mitigation proposal, prepared by the project applicant, is being released for public review simultaneously with the FEIS as Appendix A.

CNPS-10 *The comment states that Appendix N has severe shortcomings regarding whether or not it will actually mitigate for loss of wetlands on the Cordova Hills site.*

See response to comments CNPS-9, USEPA-1, USEPA-2, USEPA-9, USEPA-10, USEPA-12, USEPA-21, USEPA-24, USEPA-26, USEPA-29, USEPA-31, USEPA-32, and USEPA-33.

CNPS-11 *The comment states that the project applicant’s conceptual mitigation plan appears to propose restoration and/or creation on sites that already contain vernal pool resources and that CNPS has long considered disturbance of existing vernal pool grasslands as impact and not enhancement.*

The comment is noted. The applicant’s current mitigation proposal (included as Appendix A to the FEIS) does not include on-site creation of wetlands. These analyses are preliminary and USACE has not determined that they demonstrate the proposed creation sites are suitable to sustain established wetlands or that the proposed established wetlands would not adversely affect existing wetlands. As identified in Response to Comment USFWS-13, the applicant is no longer proposing to compensate for impacts to vernal pools through establishment within the plateau preserve. However, USACE does not agree empirically that it is not possible to establish or re-establish vernal pools or other wetlands in existing vernal pool grasslands without adversely affecting existing vernal pools or other wetlands. The project applicant’s revised mitigation proposal, which is available for review and comment in Appendix A of this FEIS, includes establishing 14.79 acres of vernal pools at the Shehadeh property and 1.78 acres of vernal pools at the Chester Drive property. Re-establishment of former aquatic resources is a preferred type of compensatory mitigation because it results in a gain in both area and function of aquatic resources within an area that previously contained aquatic resources, which help offset losses at the affected site. In addition, in many cases, establishment of aquatic resources in appropriate areas and under appropriate conditions may be conducted without adversely affecting nearby adjacent aquatic

resources. (Please see the 2015 SPD Regional Compensatory Mitigation Guidelines [January 2015] sections 4.2, 4.3, and 4.4 and their related subsections) Permittee-responsible mitigation is currently the primary source of mitigation proposed due to a lack of available agency-approved mitigation banks within the Mather Core Recovery Area. USACE has not made a determination on whether the proposed compensatory mitigation is sufficient to ensure no net loss of aquatic resource functions and services. A determination of the required compensatory mitigation to fully off-set the loss of waters of the U.S. associated with the Applicant's Preferred Alternative will be made in the ROD, if a decision is made by USACE to issue a permit for the Applicant's Preferred Alternative.

CNPS-12 *The comment asks where BMPs and other mitigation measures related to the conceptual mitigation plan are found.*

See response to comment CNPS-7.

CNPS-13 *The comment asks how the mitigation plan will ensure that preexisting vernal pool habitats are not irreparably damaged by the restoration and creation efforts.*

The project applicant's conceptual mitigation plan, provided as an appendix to the DEIS, includes preliminary analyses of hydrology based on surface topography, catchment basins, and soil profiles that indicate additional vernal pools could be created at the off-site mitigation sites without adversely affecting existing wetland resources. These analyses have not been approved by USACE, and no on-site creation is included in the applicant's current mitigation proposal, included as Appendix A to the FEIS. Vernal pool establishment and re-establishment would not be permitted by USACE unless it can be demonstrated that the proposed mitigation sites are suitable to sustain established or re-established wetlands. Compliance with the 2015 SPD Regional Compensatory Wetland Mitigation Guidelines addresses the concerns expressed in this comment.

CNPS-14 *The comment asks how the mitigation plan will ensure that disturbed areas are not overtaken by invasive species.*

As noted on page 3.4-37 of the DEIS, cattle grazing would continue as a management strategy in the plateau avoided area to minimize potential adverse effects from changes in vegetation such as increased cover of invasive grass species and buildup of thatch. In addition, as part of the CEQA EIR certification and project approval process, the project applicant committed to implementing an invasive species removal and prevention plan that is described on page 3.4-38 of the DEIS.

CNPS-15 *The comment states that it appears the project applicant's conceptual mitigation plan in appendix N of the DEIS proposes 32.84 acres of compensatory wetland creation/restoration for 39.79 acres of on-site wetland loss and 0.36 acre of loss due to off-site improvements or a mitigation ratio of only 0.82:1 .*

The project applicant has modified the proposed compensatory mitigation plan identified in the DEIS, which is located in Appendix A of the FEIS. The project applicant's currently proposed

compensatory mitigation plan would consist of 51.46 acres of preservation and 53.25 acres of creation/restoration to offset 34.6 acres of impacts to waters, including:

- ▶ Establishment and/or re-establishment of 16.57 acres of vernal pools at the Chester Drive and Shehadeh sites within the Mather Core Area (compared to 14.35 acres of impact).
- ▶ Purchase of 7.12 acres of vernal pool credits at the Toad Hill Mitigation Bank outside the Mather Core Area (compared to 1.03 acres of impact).
- ▶ Purchase of 4.90 acres of floodplain riparian credits and 24.66 acres of floodplain mosaic credits from the Cosumnes Mitigation Bank (compared to 19.22 acres of impacts to seasonal wetlands, ponds, ditches, creeks, and intermittent drainages).
- ▶ Preservation of 8.6 acres of off-site vernal pools at the Shehadeh Property, and preservation of 13.35 acres of off-site vernal pools at the Chester Drive Property.
- ▶ Preservation of 51.46 acres of on-site and off-site vernal pool crustacean habitat to offset 26.38 acres of impacts to vernal pool crustacean habitat.

The project applicant's conceptual wetland mitigation plan has not been approved by USACE. USACE cannot issue a permit unless it is determined in the ROD that the loss of wetlands and other waters of the U.S. would be compensated in a manner that would result in no-net-loss of aquatic resource functions and services. In addition, the project applicant's conceptual mitigation plan is subject to review and approval by USFWS. Consultation with USFWS under Section 7 of the Endangered Species Act is ongoing for the Cordova Hills project and a Biological Opinion must be issued before USACE can make a CWA Section 404 permit decision on the project. The Biological Opinion that will be prepared by USFWS will include terms and conditions that implement reasonable and prudent measures that will minimize the risk of take of listed species, including compensatory mitigation ratios. As described in Mitigation Measure 3.4-2c on page 3.4-68, the applicant is required to compensate for loss of vernal pool and other wetlands at ratios satisfactory to ensure no-net-loss of habitat functions and services.

CNPS-16 *The comment states that the proposed mitigation ratio does not take into account temporal losses of wetland function nor potential impacts to existing vernal pools on the mitigation sites.*

See response to comments CNPS-8 and CNPS-15. In determining the appropriate amount and type of compensatory mitigation, USACE will use the South Pacific Division's Mitigation Ratio Setting Checklist, which takes into account the requirements of 33 CFR 332, including temporal loss. The final amount and type of compensatory mitigation required by USACE would be identified in the ROD and permit, if issued. Appendix A, the applicant's current mitigation proposal, includes an assessment of temporal impacts.

CNPS-17 *The comment asks what extenuating factors USACE is considering when allowing less than 1:1 mitigation.*

USACE has not approved the amount or type of compensatory mitigation that would be required to compensate for the loss of waters of the U.S. as a result of development of the site. The amount and type of compensatory mitigation would be identified in the ROD and permit, if issued. In accordance with 33 CFR 332.3(f)(1), if a functional or condition assessment or other suitable metric is not used, a minimum one-to-one acreage or linear foot compensation ratio must be used. See response to comment CNPS-15.

CNPS-18 *The comment asks how the numbers will be justified to local land use authorities.*

See response to comment CNPS-15.

CNPS-19 *The comment states that many of the mitigation measures contained in the Biological Resources Section rely upon implementation of a mitigation plan and that some resource impacts are categorized as less than significant with mitigation, but final details of the proposed mitigation are not available at this time. The comment asserts this makes it impossible for reviewers to determine the proposed mitigation is adequate and feasible.*

The mitigation measures discussed in Section 3.4, “Biological Resources,” of the DEIS are detailed and provide specific performance standards and monitoring, reporting, and other requirements for mitigation of impacts to wetlands and Federally listed species. The wetland mitigation plan is by necessity a draft at this stage as the NEPA process must be completed prior to making a permit decision (or approving associated mitigation plans). Providing the project applicant’s conceptual mitigation plan with the DEIS allows the public to comment on the proposed plan, whereas the public would not be allowed to provide input on an already approved plan. The DEIS follows standard NEPA procedures in disclosing impacts on biological resources and providing mitigation measures that the project applicant would be required to implement following approval of the EIS and issuance of a ROD for the EIS. The conceptual mitigation plan provided as Appendix N was the project applicant’s proposed plan for mitigating wetland impacts for the purpose of obtaining a Section 404 permit from USACE at the time of the DEIS release, and it is subject to review and approval by USACE. A revised conceptual mitigation proposal, prepared by the applicant, is being released for public review simultaneously with the FEIS as Appendix A. As identified in Chapter 3.4, “Biological Resources,” of the DEIS, because USACE has not made a determination regarding the amount and type of required compensatory mitigation, the impacts to waters of the U.S. are potentially significant, even with the proposed compensatory mitigation. Prior to a permit decision, the applicant will be required to submit a Draft and Final Mitigation and Monitoring Plan (MMP) and Long-Term Management Plan (LTMP) for all proposed permittee-responsible compensatory mitigation, which must meet the requirements of 33 CFR 332 and the January 12, 2015, *Final 2015 Regional Compensatory Mitigation and Monitoring Guidelines for South Pacific Division USACE* (<http://www.spd.usace.army.mil/Portals/13/docs/regulatory/mitigation/MitMon.pdf>).

CNPS-20 *The comment indicates it would be more honest to list the impacts as significant even given the project applicant’s proposal to develop a mitigation plan.*

The DEIS does conclude that impacts to waters of the U.S. and Federally listed vernal pool branchiopods and their habitat are potentially significant and unavoidable (See Section 3.4.7, Effect 3.4-1 and Effect 3.4-2). Therefore, the DEIS does not identify a less-than-significant impact based on the project applicant's conceptual mitigation plan. The DEIS concluded in Effect 3.4-3 that impacts to special status bird species, spadefoot, and western pond turtle would be reduced to a less-than-significant level with implementation of the mitigation measures the project applicant committed to as part of the CEQA EIR certification process and additional mitigation measures identified in the DEIS. No text changes are proposed to the DEIS in response to this comment.

CNPS-21 *The comment states that lack of definitive and measurable mitigation measures constitutes deferral of mitigation.*

See response to comments CNPS-15 and CNPS-19.

CNPS-22 *The comment states that it is not adequate to say that the as-yet-to-be-developed plans will meet with agency approval.*

See response to comments CNPS-15 and USEPA-19. The ROD will identify and approve a mitigation plan if a permit is issued.

CNPS-23 *The comment expresses disappointment that the DEIS does not identify an environmentally preferable alternative.*

As stated on page 2-2, USACE is neither a proponent nor an opponent of the applicant's proposal, therefore the applicant's proposal, the Modified Proposed Action, as described in Chapter 2 of this FEIS is identified as the "Applicant's Preferred Alternative" in accordance with 40 CFR 1505.2. USACE will identify the environmentally preferable alternative or alternatives in the ROD.

CNPS-24 *The comment expresses the opinion that the Expanded Preservation Alternative is least environmentally damaging from both a wetlands and endangered species perspective.*

This comment is noted. As identified in the DEIS, this alternative would have lesser impacts to waters of the U.S. and Federally listed threatened and/or endangered species than the Proposed Action. USACE is evaluating this alternative to determine if it is practicable based on costs, logistics, or existing technology in light of overall project purposes. The comment does not raise a question or provide any specific information regarding the adequacy of the environmental analysis provided in the DEIS.

CNPS-25 *The comment expresses the opinion that the Expanded Drainage Preservation Alternative also reduces impacts to wetlands, but is not as beneficial to endangered species (as the Expanded Preservation Alternative).*

This comment is noted. As identified in the DEIS, this alternative would result in lesser impacts to waters of the U.S. and species than the Proposed Action, although would have greater impacts

to waters of the U.S. and species than the Expanded Preserve Alternative. USACE is evaluating this alternative to determine if it is practicable based on costs, logistics, or existing technology in light of overall project purposes. The comment does not raise a question or provide any specific information regarding the adequacy of the environmental analysis provided in the DEIS.

CNPS-26

The commenter requests to be informed of future activities in the area that might impact vernal pool grasslands and endangered species habitat.

This comment is noted. USACE issues a public notice for all proposed projects that would require the issuance of a standard permit. See the USACE Sacramento District website at <http://www.spk.usace.army.mil/Media/RegulatoryPublicNotices.aspx> for instructions for agencies and members of the public can be added to the public notice mailing list. For major federal actions significantly affecting the quality of the human environment, USACE must prepare an EIS. The EIS process requires solicitation of public input at various stages, including scoping, publishing of a DEIS, and publishing of an FEIS. Concurrent with the publishing of the NOI and NOA (for the DEIS and FEIS) in the *Federal Register*, USACE issues a public notice to adjacent property owners, agencies, and other interested members of the public on the action.



Larry Greene
AIR POLLUTION CONTROL OFFICER

January 29, 2015

Lisa M. Gibson
Regulatory Permit Specialist
Regulatory Division
1325 J Street, Room 1350
Sacramento, California 95814-2922
Lisa.M.Gibson2@usace.army.mil

SUBJECT: Cordova Hills DEIS – SMAQMD comments
Corps #: SPK-2004-00116
SMAQMD #: SAC20060987

Dear Ms. Gibson

Thank you for the opportunity to comment on the Cordova Hills DEIS. We have reviewed the project in a manner consistent with the California Health and Safety Code Section 40961 requirement that the District "represent the citizens of the Sacramento district in influencing the decisions of other public and private agencies whose actions may have an adverse impact on air quality within the Sacramento district." Our comments follow.

Section 3.3 Air Quality

Page 2, paragraph 2: The DEIS states that CO and NOx cause of the greatest pollution problems during the winter; however, the Sacramento region is designated as in attainment for CO, and the discussion does not mention PM_{2.5}, for which we are in nonattainment with exceedances most often occurring in the winter months. Please revise.

Page 9, Table 3.3-3: Please note that the 2012 maximum 8-hour ozone concentration for Sloughhouse is 0.106, not 0.107. Also, we recommend separating the federal and state standards into separate columns so the table is easier to interpret.

Page 16, paragraph 4: We recommend the following revisions in underline and strike out: "Milestone reports were prepared for 1996, 1999, 2002, 2006, and most recently in 2008-2011 for the 1997 8-hour ozone standard. The ~~most recent 2008 milestone report~~2006 Rate of Progress Plan demonstrated that the Sacramento Region has met the requirement of reducing volatile organic compounds (VOC) by 15 percent from 1990 to 1996."

SMAQMD-1
SMAQMD-2
SMAQMD-3
SMAQMD-4

Cordova Hills DEIS
SAC20050987
SMAQMD Comments
Sent Via Email Only

Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor ■ Sacramento, CA 95814-1908
916/874-4800 ■ 916/874-4899 fax
www.airquality.org

Page 1 of 7

Page 17, paragraph 2: We recommend the following revisions: "The PM2.5 Plan was submitted to EPA ARB in December 2013, and EPA is scheduled to ~~announce final designations by December 14, 2014~~ be updated in 2015 for submittal to EPA."

SMAQMD-5

Page 25, paragraph 1: The operational mitigation information is inaccurate. The discussion currently states:

SMAQMD determined that implementation of the above measures for the operational phase of the Proposed Action would result in a grand total of 51.47 mitigation points, for an operational emission reduction of 51.47 percent. SMAQMD's emissions reduction goal for the Proposed Action was 35 mitigation points or a 35 percent reduction. Importantly, SMAQMD further determined that *even if there were no university user at the Proposed Action, these mitigation measures would still result in a 51.47 percent reduction in emissions and still meet the emissions reduction goal.* [Emphasis added]

SMAQMD-6

To clarify, SMAQMD recommended, and the County required, a 35% operational mitigation plan (AQMP) instead of the typical 15% requirement because the project's land uses are not included in the current State Implementation Plan. SMAQMD initially determined that implementation of the mitigation measures described in the AQMP would lead to a 35.32 percent or greater reduction in operational criteria emissions. Subsequent to this determination, SMAQMD recommended, and the County required, *additional mitigation measures to achieve the 35% reduction should a University user not locate on the project site*, in order to make up for the loss in trip capture that the University user would have provided. SMAQMD verified the emissions reductions associated with the amended AQMP in January, 2013. Please see Attachment 1.

Section 3.5 Greenhouse Gases

Please note that SMAQMD adopted recommended greenhouse gas construction and operational thresholds in October 2014. See Attachment 4.

SMAQMD-7

Thank you again for the opportunity to comment. Please do not hesitate to contact me if you have any questions at (916) 874-4876 or rdubose@airquality.org.

Sincerely,



Rachel DuBose
Air Quality Planner/Analyst

Attachments:

1. Verification of Amended AQMP
2. Rules and Regulations Statement
3. Toxic Air Contaminants Statement
4. GHG Thresholds

Cordova Hills DEIS
SAC20050987
SMAQMD Comments
Sent Via Email Only

Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor ■ Sacramento, CA 95814-1908
916/874-4800 ■ 916/874-4899 fax
www.airquality.org

Page 2 of 7

Attachment 1



Larry Greene
AIR POLLUTION CONTROL OFFICER

Verification of Stated Emission Benefits

The amended operational air quality mitigation plan for the project known as Cordova Hills (SAC200600987) has been found by the Sacramento Metropolitan Air Quality Management District to be consistent with the District's *Recommended Guidance for Land Use Emission Reductions v2.5* and is anticipated to reduce the operational criteria emissions associated with the project.

The District anticipates that implementation of the reduction measures described in the plan as amended will lead to a 35 percent or greater reduction in operational oxides of nitrogen emissions.

Verified this 17th day of January, 2013.

A handwritten signature in black ink that reads "Paul Philley".

Paul Philley
Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor
Sacramento, CA 95814
pphilley@airquality.org
916-874-4882

777 12th Street, 3rd Floor ■ Sacramento, CA 95814-1908
916/874-4800 ■ 916/874-4899 fax
www.airquality.org

Cordova Hills DEIS
SAC20050987
SMAQMD Comments
Sent Via Email Only

Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor ■ Sacramento, CA 95814-1908
916/874-4800 ■ 916/874-4899 fax
www.airquality.org

Page 3 of 7

Attachment 2
SMAQMD Rules & Regulations Statement (revised March 2012)

The following statement is recommended as standard condition of approval or construction document language for all development projects within the Sacramento Metropolitan Air Quality Management District (SMAQMD):

All projects are subject to SMAQMD rules in effect at the time of construction. A complete listing of current rules is available at www.airquality.org or by calling (916)874-4800. Specific rules that may relate to construction activities or building design may include, but are not limited to:

Rule 201: General Permit Requirements. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from SMAQMD prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the SMAQMD early to determine if a permit is required, and to begin the permit application process. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc.) with an internal combustion engine over 50 horsepower are required to have a SMAQMD permit or a California Air Resources Board portable equipment registration. Other general types of uses that require a permit include, but are not limited to dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions.

Rule 403: Fugitive Dust. The developer or contractor is required to control dust emissions from earth moving activities, storage or any other construction activity to prevent airborne dust from leaving the project site.

Rule 414: Water Heaters, Boilers and Process Heaters Rated Less Than 1,000,000 BTU per Hour. The developer or contractor is required to install water heaters (including residence water heaters), boilers or process heaters that comply with the emission limits specified in the rule.

Rule 417: Wood Burning Appliances. This rule prohibits the installation of any new, permanently installed, indoor or outdoor, uncontrolled fireplaces in new or existing developments.

Rule 442: Architectural Coatings. The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.

Rule 460: Adhesives and Sealants. The developer or contractor is required to use adhesives and sealants that comply with the volatile organic compound content limits specified in the rule.

Rule 902: Asbestos. The developer or contractor is required to notify SMAQMD of any regulated renovation or demolition activity. Rule 902 contains specific requirements for surveying, notification, removal, and disposal of asbestos containing material.

Naturally Occurring Asbestos: The developer or contractor is required to notify SMAQMD of earth moving projects, greater than 1 acre in size in areas "Moderately Likely to Asbestos" within eastern Sacramento County. Asbestos Airborne Toxic Control Measures, Section 93105 & 93106 contain specific requirements for surveying, notification, and handling soil that contains naturally occurring asbestos.

Attachment 3

Notice: Permitted and Unpermitted Sources of Toxic Air Contaminants (TACs)

Lead Agencies should make a concerted effort to disclose potential TAC-related health impacts from:

- locating sources of TAC emissions in close proximity to existing or future planned receptors (e.g., gasoline dispensing facilities subject to District permits and non-permitted sources of TACs such as high traffic volume roadways), and,
- locating receptors in close proximity to an existing or future planned source of TAC emissions.

Permitted sources can be identified using ARB's Community Health Air Pollution Information System (CHAPIS) and supplemented using the EPA's Toxics Release Inventory Explorer search tools.

For more information, refer to Chapter 5 of our [CEQA Guide](#).

Attachment 4

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Resolution No. 2014 - 028

Recommended Greenhouse Gas Emissions Thresholds of Significance

WHEREAS, Section 15064.7 of the California Environmental Quality Act (CEQA) Guidelines encourages public agencies to develop and publish thresholds of significance to use in the determination of the significance of environmental effects, and states that thresholds of significance adopted for general use as part of the agency's environmental review process must be adopted by ordinance, resolution, rule or regulation; developed through a public review process; and supported by substantial evidence; and

WHEREAS, the Sacramento Metropolitan Air Quality Management District utilized guidance published by the California Air Pollution Control Officers Association, *CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, and a review of local projects in developing the recommended greenhouse gas emissions thresholds of significance; and

WHEREAS, the Sacramento Metropolitan Air Quality Management District held a public workshop on November 13, 2013, coordinated with local agencies, held a public hearing on October 23, 2014, and considered comments on the recommended greenhouse gas emissions thresholds of significance; and

WHEREAS, the Sacramento Metropolitan Air Quality Management District provided substantial evidence supporting the recommended greenhouse gas emissions thresholds of significance and mitigation levels in a document entitled *Justification for Greenhouse Gas Emissions Thresholds of Significance*; and

WHEREAS, the adoption of the recommended greenhouse gas emissions thresholds of significance will support compliance with CEQA and lead to contributions to greenhouse gas emission reductions goals of the Global Warming Solutions Act (AB32); and

WHEREAS, jurisdictions that have adopted greenhouse gas reduction plans meeting the requirements of Section 15183.5 of the CEQA Guidelines or have adopted their own greenhouse gas emissions thresholds of significance may opt not to utilize the Sacramento Metropolitan Air Quality Management District's recommended greenhouse gas emissions thresholds of significance if a project demonstrates consistency with the jurisdiction's reduction plan or threshold.

NOW, THEREFORE, BE IT RESOLVED THAT the Board of Directors of the Sacramento Metropolitan Air Quality Management District has determined that the development and adoption of the recommended greenhouse gas emissions thresholds of significance meets the requirements of Section 15064.7 of the CEQA Guidelines; and

Cordova Hills DEIS
SAC2.0050987
SMAQMD Comments
Sent Via Email Only

Sacramento Metropolitan Air Quality Management District
777 12th Street, 3rd Floor ■ Sacramento, CA 95814-1908
916/874-4800 ■ 916/874-4899 fax
www.airquality.org

Page 6 of 7

Attachment 4, end

BE IT FURTHER RESOLVED THAT the Board of Directors of the Sacramento Metropolitan Air Quality Management District adopts the following recommended greenhouse gas thresholds of significance:

- Construction phase of projects – 1,100 metric tons of CO₂e per year
- Operational phase of land development projects – 1,100 metric tons of CO₂e per year
- Stationary source projects – 10,000 direct metric tons of CO₂e per year; and

BE IT FURTHER RESOLVED THAT the level of mitigation for significant projects is based on demonstrating consistency with AB32 and the California Air Resources Board's Climate Change Scoping Plan goal to reduce greenhouse gas emissions, which is currently a 21.7% reduction of emissions, and

BE IT ORDERED THAT the Board of Directors of the Sacramento Metropolitan Air Quality Management District authorize staff to update the mitigation percentage as changes to the Scoping Plan are made, in consultation with District Counsel, and an opportunity for public comment is provided prior to any changes being made; and

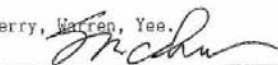
BE IT FURTHER ORDERED THAT the recommended thresholds of significance are effective immediately upon adoption.

On a Motion by Director Hansen and seconded by Director Frost, the foregoing Resolution was passed and adopted by the Board of Directors of the Sacramento Metropolitan Air Quality Management District, State of California, the 23rd day of October, 2014, by the following vote.

AYES: Directors Cohn, Crews, Fong, Frost, Hansen, MacGlashan, Nottoli.

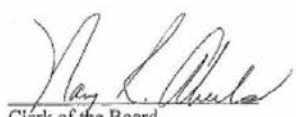
NOES: Directors Starsky.

ABSENT: Directors Cooper, Peters, Serna, Terry, ~~Warren~~, Yee.


Chair, Board of Directors
Sacramento Metropolitan Air
Quality Management District

(SEAL)

ATTEST:


Clerk of the Board
Sacramento Metropolitan Air Quality Management District

SMAQMD-1 (Page 3.3-2, paragraph 2) *The comment requests a change to the discussion of wintertime pollutants. The comment requests that carbon monoxide (CO), which is attainment for the region, be removed and particulate matter (PM_{2.5}), which is nonattainment for the region, be added.*

As shown in Chapter 4, “Errata,” the referenced text has been changed in response to this comment.

SMAQMD-2 (Page 3.3-9, Table 3.3-3) *The comment notes that in Table 3.3-3, the 2012 maximum 8-hour ozone concentration registered at the Sloughhouse monitoring station is 0.106, and not the 0.107 stated in the section.*

As shown in Chapter 4, “Errata,” the referenced monitoring value has been changed in this table.

SMAQMD-3 (Page 3.3-9, Table 3.3-3) *Comment requests that in Table 3.3-3, the state and Federal standards be separated into two columns.*

In Table 3.3-3, Federal standards and values are presented in one row, and state (1-hour ozone) standards and values are presented in another row. As shown in Chapter 4, “Errata,” text was added to clarify the table presentation.

SMAQMD-4 (Page 3.3-16, paragraph 4) *The comment requests a revision to the text as follows: “Milestone reports were prepared for 1996, 1999, 2002, 2006, and most recently in 2011 for the 1997 8-hour ozone standard. The 2006 Rate of Progress Plan demonstrated that the Sacramento Region has met the requirement of reducing volatile organic compounds (VOC) by 15 percent from 1990 to 1996.”*

As shown in Chapter 4, “Errata,” the referenced text has been changed as proposed in the comment.

SMAQMD-5 (Page 3.3-17, paragraph 2) *The comment requests a revision to the text as follows: “The PM_{2.5} Plan was submitted to ARB in December 2013, and is scheduled to be updated in 2015 for submittal to EPA.”*

As shown in Chapter 4, “Errata,” the referenced text has been changed as proposed in the comment.

SMAQMD-6 (Page 3.3-25, paragraph immediately preceding Table 3.3-7) *The comment requests that the text be revised to reflect the fact that SMAQMD recommended and the County required a 35 percent air quality management plan (AQMP) (rather than a typical 15 percent AQMP) because the project’s land uses are not included in the current State Implementation Plan. In addition, SMAQMD recommended and the County required that additional measures to achieve the 35 percent should be implemented in the case the proposed university is not developed.*

As shown in Chapter 4, “Errata,” the referenced text has been changed to state the reasoning behind the 35 percent AQMP. The revised text also presents the requirement to demonstrate that without the university, the proposed project would still achieve the 35 percent AQMP.

SMAQMD-7 *Comment notes that SMAQMD has adopted GHG construction and operational thresholds of significance.*

While the DEIS analysis was in preparation, the now-adopted SMAQMD GHG thresholds of significance were not yet established. The original analysis used a previous SMAQMD-recommended methodology to amortize construction emissions and add to annual operational emissions. Construction GHG emissions are presented in Table 3.5-1 (page 3.5-12 of the DEIS), and the DEIS concluded that both construction and operational GHG emissions would be a significant impacts. Application of the now-adopted SMAQMD GHG thresholds to the construction GHG emissions that were disclosed in the DEIS would not change the significance conclusion for GHG emissions.

Operational emissions were compared against thresholds prescribed by the CAP, which are also applicable to the proposed project. Similar to construction GHG emissions, operational emissions were originally concluded in the DEIS to be significant and unavoidable, and would continue to be significant and unavoidable using the recently-adopted SMAQMD operational GHG threshold. Therefore, although the original analysis in the DEIS did not incorporate the recently-adopted SMAQMD GHG thresholds, the significance conclusions determined in the DEIS would not change with use of the recently-adopted SMAQMD GHG thresholds. No text changes are proposed to the DEIS in response to this comment.



WOOD

January 15, 2015

Lisa Gibson
Regulatory Permit Specialist
US Army Corps of Engineers, Sacramento District
1325 J Street, Room 1350
Sacramento, California 95814-2922
Email: Lisa.M.Gibson2@usace.army.mil

Re: Support for the Cordova Hills Master Plan Development Project

Dear Ms Gibson:

On behalf of Region Builders, we would like to share with you our **support for the Cordova Hills Master Plan Development Project**. Founded in July of 2012, Region Builders, Inc. is a not-for-profit association focused on advancing regional economic growth and vitality, promoting sustainable communities and creating jobs for the future. Our organization represents fifteen local trade and professional associations.

We believe that Cordova Hills will offer a unique opportunity to bring an extraordinary 21st century vision to our Region by providing a mix of housing, exceptional educational opportunities and help boost economic vitality by improving access to existing and future job centers and commercial areas. We respectfully request your expeditious support of this project.

Large high quality projects, such as Cordova Hills, offer the best value for home buyers, retain their value better, and therefore make us a more desirable community for a business to relocate. To remain competitive in attracting employers we need to keep our home prices reasonable. It is about jobs, and to get them we need housing that is affordable and attractive, and to do that we need to maintain an inventory of immediately developable lots.

WOOD-1

Sincerely,

Joshua Wood
Executive Director
Region Builders

WOOD-1

The comment expresses support for the Cordova Hills project and does not raise any environmental issues or concerns related to the EIS.

This comment is noted. The comment does not identify any issues related to the analysis contained in the DEIS; therefore, no changes to the text of the DEIS are required.

January 28, 2015

Col. Michael Farrell
District Commander
U.S. Army Corps of Engineers
1325 J Street, Suite 1440
Sacramento, CA 95814

Robert J. McGarvey
Mayor

David M. Sander
Vice Mayor

Donald Terry
Council Member

Linda Budge
Council Member

Dan Skoglund
Council Member

RE: Cordova Hills 404 Permit Application

I am commenting on the Cordova Hills project as a single Councilmember from the City of Rancho Cordova, who has watched the evolution of this master planned project over the last ten years. My comments are not officially those of the City of Rancho Cordova.

As the Corps of Engineers reviews the 404 permit application for this project, I suggest that it is important to recognize how the Cordova Hills project has incorporated some of the most sustainable design of any large master plan in our region. A great variety (choice) of residential densities, walkable communities complete with local and regional retail and commercial/office opportunities, easy access to parks, schools and open space, all make the project an excellent model for new age, sustainable, greenfield development.

The over 75 miles of walking and bicycling trails that will interconnect the various residential villages, and the project-devoted transit system that will make it very convenient for residents to connect the already established regional light rail and bus system already within our City will provide residents with a viable and convenient option to automobile usage.

While Cordova Hills lies within the County's jurisdiction, the reality that the project is immediately adjacent to our Rancho Cordova City limits, made cooperative planning of the community a necessity. I am very pleased that the Cordova Hills plan incorporates a town center to help meet the future retail and work center needs of this part of the region. In 2011, our City commissioned "A Commercial Development Strategy of Rancho Cordova," which specifically indicated a need for greater commercial development planning in the southerly portion of our City, the area most proximate to the Cordova Hills project. It is important that

BUDGE-1

City of Rancho Cordova
2729 Prospect Park Drive, Rancho Cordova, CA 95670
(916) 851-8700

aFreshTake.org

as we plan in our region, we do everything we can to maximize a good jobs to housing balance, and Cordova Hills will help to attain this in our area.

I hope that the Corps can use my perspective as it continues to process the Cordova Hills project application.

△
BUDGE-1
|

Sincerely,



Linda Budge
Councilmember, City of Rancho Cordova

cc. Lisa Gibson, U.S. Army Corps of Engineers

BUDGE-1

The comment expresses support for the Cordova Hills project and does not raise any environmental issues or concerns related to the EIS.

This comment is noted. The comment does not identify any issues related to the analysis contained in the DEIS; therefore, no changes to the text of the DEIS are required.



**BOARD OF SUPERVISORS
COUNTY OF SACRAMENTO**
700 H STREET, SUITE 2450 • SACRAMENTO, CA 95814

RECEIVED

JAN 29 2015

SPK EXECUTIVE OFFICE

DON NOTTOLI
SUPERVISOR, FIFTH DISTRICT
Telephone (916) 874-5465
FAX (916) 874-7593
E-MAIL: nottolid@saccounty.net

January 28, 2015

Colonel Michael Farrell
District Commander
U. S. Army Corps of Engineers
1325 J Street, Suite 1440
Sacramento, CA 95814

Dear Colonel Farrell:

I am writing to offer some brief comments on the Cordova Hills project and the 404 permit application which is currently being reviewed by your agency. As the member of the Sacramento County Board of Supervisors representing the area in which the Cordova Hills property is located, I have followed this project throughout the planning process for nearly 10 years.

In early 2013, the land use plan for Cordova Hills was approved by the Sacramento County Board of Supervisors. This action, among other things, included the rezoning of portions of the subject property for residential, commercial, educational and other uses.

As you review and consider this project, I think it important to note that the approved Cordova Hills project includes some of the most sustainable design elements of any large master plan in the Sacramento region. It was the first major project to come before the Board of Supervisors following the County's update of its General Plan in 2011 and incorporated a variety of elements important in assuring sustainable greenfield development.

The Cordova Hills project offers a variety of residential densities, walkable communities complete with local and regional retail and commercial/office space as well as easy access to parks, schools and open space. The plan was refined numerous times and reflects expanded open space areas to avoid and preserve valuable natural resources.



Of further note, the project plan includes more than 75 miles of bicycle and pedestrian trails which will serve to connect the various residential villages. Additionally, a dedicated transit service for the project will make it easier for residents to connect with the already established regional light rail and bus system serving the Highway 50 corridor and offer residents a viable and convenient option to automobile usage. The Highway 50 corridor, which threads through the cities of Rancho Cordova and Folsom, is a major job center in our six-county region and the Cordova Hills plan will help address efforts to improve the jobs/housing balance in this area.



NOTTOLI-1

Lastly, the Cordova Hills plan includes a 224-acre site for a college or university. The commitment to this vision of a university is incorporated into the zoning for the project and is expressly called out in the 30-year development agreement between the landowners and the County.

I respectfully acknowledge the specific role the Corps of Engineers plays relative to this project and hope this information is useful in pointing out the detailed work and ongoing effort which has been incorporated into the planning and design of the Cordova Hills project. I thank you in advance for the time and attention given to your review and consideration of this important matter.

Sincerely,

Don Nottoli, Supervisor
Fifth District

DN:sv

cc: Ms. Lisa Gibson
U. S. Army Corps of Engineers

NOTTOLI-1 *The comment expresses support for the Cordova Hills project and does not raise any environmental issues or concerns related to the EIS.*

This comment is noted. The comment does not identify any issues related to the analysis contained in the DEIS; therefore, no changes to the text of the DEIS are required.



WWW.CONNECTORJPA.NET

CSECJPA

10640 Mather Blvd., Suite 120
Tel: 916-876-9094

Mather, CA 95655

Fax: 916-854-9304

Regulatory Division
USACE-Sacramento

February 26, 2015

Lisa Gibson
Regulatory Permit Specialist
United States Army Corps of Engineers
1325 J Street, Room 1350
Sacramento, California 95814
Lisa.M.Gibson2@usace.army.mil

**RE: SPK-2004-00116
COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE
CORDOVA HILLS PROJECT**

Dear Ms. Gibson,

Thank you for providing the draft of the Environmental Impact Statement (DEIS) for the Cordova Hills Project (SPK-2004-00116) to the Connector JPA and please accept our apologies for the tardiness of our review. The Connector JPA has a few comments on the DEIS and we appreciate the opportunity to provide these comments.

- 1. Exhibit 2-8 "Areas of Wetland and Water Avoidance and Effects – Proposed Action", on page 2-21

The "Avoided Area" boundary shown in this exhibit is not correct. The boundary does not match the interchange reservation footprint for the Grant Line Road / University Avenue interchange that was established as part of the large lot Tentative Map which was approved by the County of Sacramento. There have been lengthy discussions between the County, landowner and Connector JPA regarding the footprint and it was agreed that this boundary would be modified.

This same boundary is also depicted in Exhibit 2-4 "Proposed Action Land Use Plan", Exhibit 2-6 "Proposed Parks and Open Space – Proposed Action", and Exhibit 3.4-4 "Areas of Wetland and Water Avoidance and Effects – Proposed Action",

- 2. Table 3.4-4 "Summary of Direct Off-Site Wetland Effects from Proposed Roadways", on page 3.4-31, Line 5, "Intersection of Jackson Highway/SR 16 and Grant Line Road" (500 DUE Trigger).

This table indicates that there are zero acres of impact for "Roadside Ditch Effects." However the approved jurisdiction delineation (prepared by ECORP Consulting Group, map date 4/19/2013) for off-site improvements indicates that there are 0.085 acres of impact. Please reconcile this discrepancy.

- 3. Table 3.4-4 "Summary of Direct Off-Site Wetland Effects from Proposed Roadways", on page 3.4-31, and the approved Jurisdictional Delineation of Potential Feature Impacts prepared by ECORP Consulting Group, map date 4/19/2013.

JPA BOARD OF DIRECTORS

DAVID SANDER
City of Rancho Cordova

PATRICK HUME
City of Elk Grove

RONALD MIKULACO
El Dorado County

DON NOTTOLI
Sacramento County

JEFF STARSKY
City of Folsom

CSECJPA-1

CSECJPA-2

CSECJPA-3

It is unknown if the Connector JPA Project Design Guidelines were considered when these impacts were calculated. The Connector JPA respectfully requests the opportunity to review the design details that created these maps as the footprints do not appear to match our facility.

CSECJPA-3
cont.

4. Exhibit 2-7 "Proposed Trail Plan – Proposed Action", on page 2-20

This exhibit identifies the proposed trail plan for the project. This plan has 3 connections to the Regional Trail that is part of the Capital SouthEast Connector: North Loop Road, Chrysanthy Boulevard and University Avenue. However the Regional Trail will be located on the west side of the Connector, thus in order for a connection to be made to the Cordova Hills property a pedestrian overcrossing would be required at the Grant Line Road / University Avenue interchange and the Grant Line Road / North Loop Road intersection. Full access will be provided at Chrysanthy Boulevard and a pedestrian bridge will not be required. Pedestrian bridges are not shown on this Exhibit at these locations and it is unknown if the bridges were considered when impacts were calculated.

CSECJPA-4

5. Section 2-7 "Pilatus Alternative" on page 2-88 and Exhibit 2-21 "Pilatus Alternative Land Use Plan"

This section indicates that "the Pilatus site is owned by the project applicant and the inclusion of this northern parcel for the Pilatus Alternative is a plausible extension of development for the project applicant." Please note respectfully that the land use plan shown in Exhibit 2-21 indicates that this parcel would primarily be served by a connection through North Loop Road. The approved development agreement for the Cordova Hills project does not provide permanent, unqualified at-grade access at the Grant Line Road / North Loop Road intersection. North Loop Road will be a right-in/right-out connection to the Connector and thus it is likely that the land use will be inadequately accessed. Any additional access proposal should respect the conditions of the Cordova Hills development agreement.

CSECJPA-5

Again, thank you for the opportunity to review the DEIS for the Cordova Hills project. If any of the comments above are unclear or warrant further discussion please feel free to contact me at (916) 876-9094 or at ZlotkowskiT@ConnectorJPA.net

Sincerely,



Tom Zlotkowski
Executive Director

Cc: Mark Hanson, SBM
Dean Blank, Sac County DOT
Kamal Atwal, Sac County DOT
Catherine Hack, Sac County PER

- CSECJPA-1 *The comment states that the avoided area boundary identified in Exhibits 2-4, 2-6, 2-8, and 3.4-4 of the EIS is not correct because it does not match the interchange reservation footprint for the Grant Line Road/University Avenue interchange established in an approved Tentative Map.*

USACE acknowledges that the large lot tentative map approved by Sacramento County contained a reservation for the interchange footprint at Grant Line Road/University Avenue and will take that reservation into consideration in any permitting decision it makes for the Cordova Hills project. The Proposed Action evaluated in the DEIS is the Cordova Hills project as approved by the Sacramento County Board of Supervisors. The Cordova Hills project does not include construction of the ultimate interchanges planned by the Southeast Connector JPA for the Connector facility. The Connector interchange will be a separate project. If construction of the interchange by the Southeast Connector JPA would result in the discharge of dredged and/or fill material into waters of the United States, the proponent of the Connector project will be responsible for obtaining a CWA Section 404 permit prior to the discharge.

- CSECJPA-2 *The comment states that the acreage of “roadside ditch effects” identified in Table 3.4-4 is incorrect.*

Although Table 3.4-4 identifies the correct total impacts to wetlands of 0.142 acres, impact numbers were inaccurately stated in Table 3.4-4 for the intersection of Jackson Highway/SR16 and Grant Line Road for the impacts to the specific wetland types. As shown in Chapter 4, “Errata,” of the FEIS, Table 3.4-4 has been revised to reflect impacts to 0.004 acres of Vernal Pools; 0.010 acres of Stock Ponds; 0.043 acres of Swales, Streams and Creeks; and 0.085 acres of Roadside Ditches.

- CSECJPA-3 *The comment inquires whether the Connector JPA project design guidelines were considered in calculation of these impacts, and requests the opportunity to review design details.*

Please see Response to Comment CSECJPA-1, above. The Cordova Hills project includes construction of improvements to Grant Line Road that are designed to be compatible with the Connector and are based on the Connector JPA Project Design Guidelines. They were reviewed and approved by the Sacramento County Department of Transportation. However, because the improvements that the Cordova Hills permit applicant is conditioned to construct reflect portions of the ultimate Connector project roadway cross section, the associated wetland impacts only reflect those that would be caused by the Cordova Hills permit applicant’s activities. The impacts due to the proposed improvements that will be provided by the Cordova Hills permit applicant will be smaller and are not those larger impacts that the ultimate Connector JPA interchange improvements would cause if and when they are built by the Connector JPA. Those additional wetland impacts will need to be addressed by the Connector JPA in its CWA Section 404 permit application.

CSECJPA-4 *The comment identifies trail connections with the Regional Trail to North Loop Road, Chrysanthy Boulevard, and University Avenue, and asks whether pedestrian bridges were considered when impacts were calculated.*

Please see Response to Comment CSECJPA-1, above. Grade-separated pedestrian access, if desired, would be provided as part of the Connector JPA's project when it alters intersections to provide interchanges or otherwise modifies them. The Cordova Hills' project description, approved land plan, SPA and Conditions of Approval do not include pedestrian bridges at these locations. The Cordova Hills project intersection improvements include construction of full at-grade, signalized pedestrian crossings at those three intersection locations. Impacts related to the Cordova Hills intersection design have been addressed in the EIS.

CSECJPA-5 *The comment states that North Loop Road does not provide permanent, unqualified at-grade access at Grant Line Road, and that the Pilatus Alternative land uses would likely be inadequately accessed.*

No application is being processed for the development of the Pilatus Alternative. Thus, roadway access considerations have not been addressed by Sacramento County for this alternative. The comment does not identify any issues related to the analysis contained in the DEIS; therefore, no changes to the text of the DEIS are required.

TAYLOR & WILEY

A PROFESSIONAL CORPORATION

ATTORNEYS

2870 GATEWAY OAKS DR., SUITE 200
SACRAMENTO, CALIFORNIA 95833

TELEPHONE: (916) 929-5545

TELEFAX: (916) 929-0283

January 23, 2015

JOHN M. TAYLOR
JAMES B. WILEY
JESSE J. YANG
KATE A. WHEATLEY
MATTHEW S. KEASLING

OF COUNSEL
KATHLEEN R. MAKEL

Lisa Gibson
U.S. Army Corps of Engineers
Sacramento District, Regulatory Branch
1325 J Street, Room 1350
Sacramento, CA 95814-2922

Dear Lisa:

On behalf of Tsakopoulos Investments, we have reviewed the Draft Environmental Impact Statement for the Cordova Hills project. We have one comment with respect to Table 3.0-2, entitled "Related Residential/Commercial Actions in Eastern Sacramento County and the City of Rancho Cordova." Some of the information with respect to the Jackson Township 900 (formerly Excelsior Estates) is incorrect. Please revise this information as follows

- Project Name - Jackson Township 900
- Residential Acreage - 368.2 (based on updated land plans recently submitted to the Corps)
- Commercial Acreage - 79.1 (based on updated land plans recently submitted to the Corps)
- Number of Units - 3,959(based on updated land plans recently submitted to the Corps)

WHEATLEY-1

Please also note that, prior to publication of the Final EIS for the Cordova Hills project, we expect the "total waters of the U.S" and "affected waters of the U.S." acreages to change given the recent update to our jurisdictional delineation to add a new, 25-acre parcel to the project boundary.

WHEATLEY-2

Thank you for the opportunity to comment on this document.

Very truly yours,

Kate A. Wheatley

WHEATLEY-1 *The comment states that some of the information pertaining to Jackson Township 900 (formerly Excelsior Estates) is incorrect as presented on Table 3.0-2, “Related Residential/Commercial Actions in Eastern Sacramento County and the City of Rancho Cordova.”*

The project information for Jackson Township 900 has been edited as requested. Please refer to Chapter 4, “Errata,” which identifies the proposed change to Table 3.0-2.

WHEATLEY-2 *The comment states that prior to publication of the Final EIS, the commenter expects the “total waters of the U.S.” and “affected waters of the U.S.” acreage to change given the recent update to the jurisdictional delineation to add a new, 25-acre parcel to the project boundary.*

This comment is noted. Table 3.0-2 has been updated to identify 53.85 existing waters of the U.S. (approximate) on the JT 900 site, and 45.68 acres of affected waters of the U.S. (approximate).

This page intentionally left blank.

4 ERRATA

4.1 INTRODUCTION

This chapter shows revisions to the DEIS, subsequent to the document’s publication and public review. The revisions are presented in the order in which they appear in the DEIS and are identified by page number in respective chapters. These revisions are shown as excerpts from the DEIS, with strikethrough (~~strikethrough~~) text in indicate deletions and underlined (underlined) text to indicate additions.

4.2 REVISIONS TO THE DEIS

4.2.1 CHAPTER 2, “DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES”

Pages 2-51 through 2-52, in Table 2-8, Measure 61 has been moved up and renumbered as Measure 55.

Table 2-8 Sacramento County Certified EIR Mitigation Measures, Development Agreement Obligations, and Conditions of Approval			
EIR	DA	COA	Measure
✓	✓	✓	<p><u>55. Commence reconstruction and widening of the existing intersection of Sunrise Boulevard at Jackson Road (SR 16) pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation and Caltrans, provided that the County, Caltrans and the City of Rancho Cordova have reached agreement for construction of the portion of the improvements within the City’s jurisdiction. Improvements shall include an eastbound through lane, an eastbound through-right turn shared lane, and an eastbound left turn lane; a northbound left turn lane and a northbound through-right turn shared lane; two westbound through lanes, a westbound right turn lane, and a westbound left turn lane; a southbound through lane, a southbound left turn lane, and a southbound right turn lane. Note: The two eastbound and westbound through lanes shall be carried through the intersection. (Final EIR Mitigation Measure: TR-2.D)</u></p>
		✓	<p>Prior to the Recordation of the Final Maps for 850 DUEs within the Cordova Hills SPA:</p> <p>565. Commence reconstruction and widening of the existing intersection of Grant Line Road at Douglas Road to a signalized intersection pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation, provided that the County and the City of Rancho Cordova have reached agreement for construction of the portion of the improvements within the City’s jurisdiction. Performance of this condition shall be held in abeyance pending such agreement and development may continue. Improvements shall include dual northbound left turn lanes and a northbound through lane; a southbound u-turn lane, a southbound through lane and a southbound right turn lane; and an eastbound left turn lane and an eastbound right turn lane. Note: Bus turnouts will be required on Grant Line Road and Douglas Road.</p>
		✓	<p>Prior to the Recordation of the Final Maps for 1,800 DUEs within the Cordova Hills SPA:</p> <p>576. Commence reconstruction and widening of the Grant Line Road at Douglas Road intersection to modify a signalized intersection pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation, provided that the County and the City of Rancho Cordova have reached agreement for construction of the portion of the improvements within the City’s jurisdiction. Performance of this condition shall be held in abeyance pending</p>

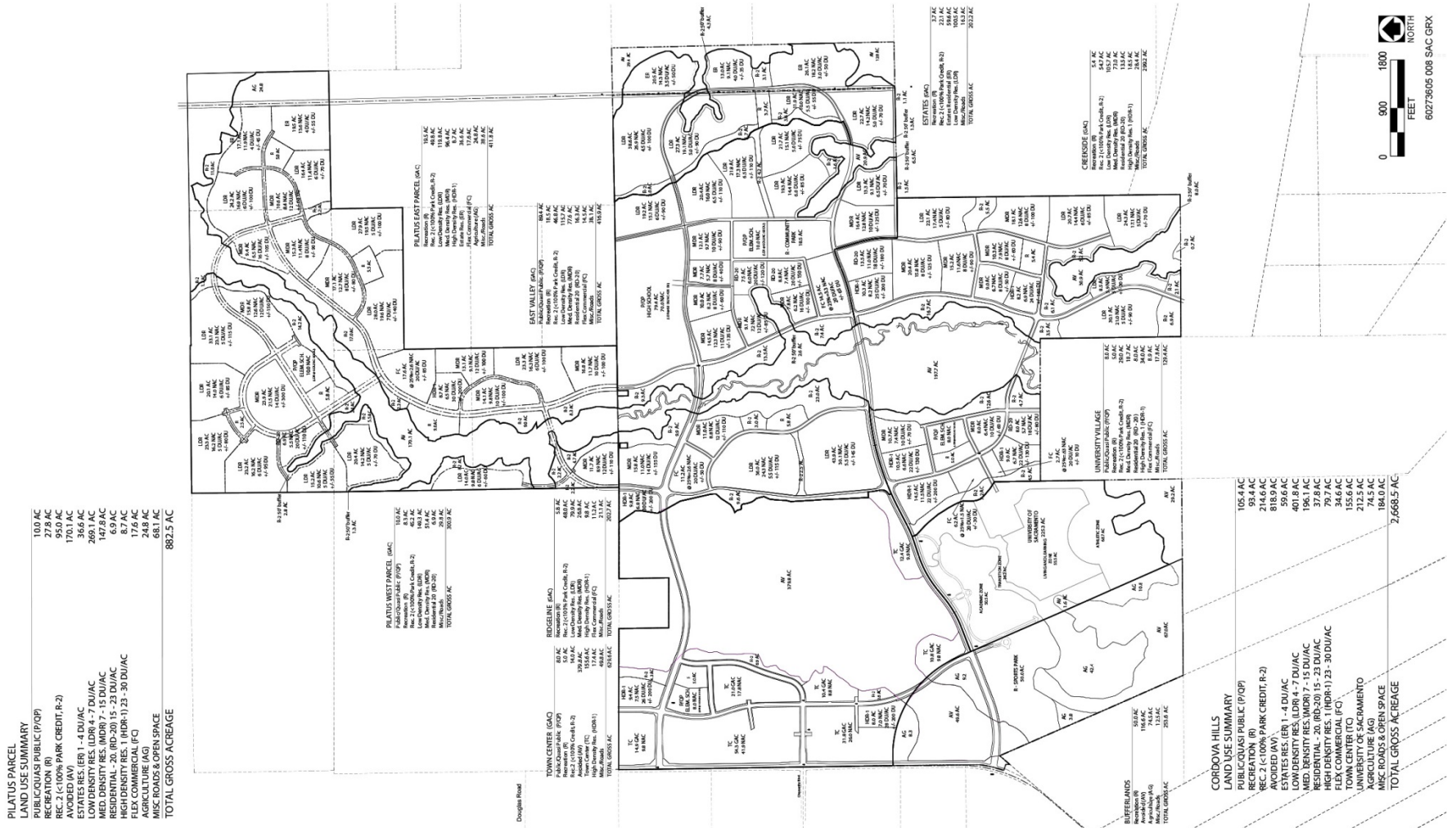
**Table 2-8
Sacramento County Certified EIR Mitigation Measures, Development Agreement Obligations, and
Conditions of Approval**

EIR	DA	COA	Measure
			such agreement and development may continue. Improvements shall include a southbound u-turn lane, two southbound through lanes and a southbound right turn lane; an eastbound left turn lane and an eastbound free right turn lane; and dual northbound left turn lane and two through lanes. For the free-right turn movements, provide sufficient acceleration lane length and grant the right of direct vehicular access to the County of Sacramento along the acceleration lane length to the satisfaction of the Department of Transportation. Note: Bus turnouts will be required on Grant Line Road and Douglas Road. The through lanes in the northbound and southbound directions shall be carried through the intersection.
			587. Commence reconstruction and widening of Grant Line Road from an existing two lane road section to a four-lane thoroughfare section from North Loop Road to Douglas Road based on a 96-foot standard thoroughfare pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation, provided that the County and the City of Rancho Cordova have reached agreement for construction of the portion of the improvements within the City's jurisdiction. Performance of this condition shall be held in abeyance pending such agreement and development may continue. (Note: Bus turnouts will be required on Grant Line Road. Note: Condition number 51 requires improvements to the intersection of North Loop Road and Grant Line Road and Condition number 56 requires improvements to the intersection of Douglas Road and Grant Line Road.)
✓	✓		Prior to the Recordation of the Final Maps for 2,000 DUEs within the Cordova Hills SPA: 598. Modify the existing intersection of Bradshaw Road and Jackson Road (SR 16) to provide a second westbound through lane pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation and Caltrans. Note: The additional westbound through lane shall be carried through the intersection. <i>(Final EIR Mitigation Measure: TR-1.A)</i>
		✓	6059. Commence reconstruction and widening of the existing intersection of Grant Line Road at Kiefer Boulevard to a signalized intersection pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation, provided that the County and the City of Rancho Cordova have reached agreement for construction of the portion of the improvements within the City's jurisdiction. Performance of this condition shall be held in abeyance pending such agreement and development may continue. Improvements shall include a northbound left turn lane, and a northbound through-right turn shared lane; a westbound left-through-right turns shared lane; a southbound left turn lane, and a southbound through-right turn shared lane; and an eastbound left-through-right turns shared lane.
✓		✓	Prior to the Recordation of the Final Maps for 3,200 DUEs within the Cordova Hills SPA: 610. Commence reconstruction and widening of the existing intersection of Grant Line Road and White Rock Road pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation. Improvements shall include dual northbound left turn lanes and two northbound through lanes; two southbound through lanes and one southbound right turn lane; two eastbound left turn lanes, and one eastbound right turn lane. On the western leg of the intersection, two westbound departure lanes are required. Note: A project to widen White Rock Road from two lanes to four lanes between Grant Line Road and Prairie City Road is currently (2012) under construction. <i>(Final EIR Mitigation Measure: TR-1.E)</i>
✓	✓	✓	61. Commence reconstruction and widening of the existing intersection of Sunrise Boulevard at Jackson Road (SR 16) pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation and Caltrans, provided that the County, Caltrans and the City of Rancho Cordova have reached agreement for construction of the portion of the improvements within the City's jurisdiction. Improvements shall include an eastbound through lane, an eastbound through right turn shared lane, and an eastbound left turn lane; a northbound

**Table 2-8
Sacramento County Certified EIR Mitigation Measures, Development Agreement Obligations, and
Conditions of Approval**

EIR	DA	COA	Measure
			<p>left turn lane and a northbound through right turn shared lane; two westbound through lanes, a westbound right turn lane, and a westbound left turn lane; a southbound through lane, a southbound left turn lane, and a southbound right turn lane. Note: The two eastbound and westbound through lanes shall be carried through the intersection. (<i>Final EIR Mitigation Measure: TR 2.D</i>)</p>

Page 2-89, Exhibit 2-21 has been replaced with the following (Pilatus Alternative Land Use Plan):



4.2.2 CHAPTER 3, "AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND MITIGATION MEASURES"

Page 3.0-13, in Table 3.0-2, Excelsior Estates has been updated to reflect the most current project information.

Table 3.0-2 Related Residential/Commercial Actions in Eastern Sacramento County and the City of Rancho Cordova								
Map Key	Development (USACE ID Number)	Type of Development	Total Waters of the U.S. (Approximate)	Affected Acres of Waters of the U.S. (Approximate)	Residential Acreage	Commercial Acreage	Units	Current Status
1, 2	Easton Place at Easton and Glenborough at Easton (SPK-2004-00515)	Residential, Commercial	23.16	5.37	592	213	4,883	Approved
3	Capital Village	Residential	None	None	524	N/A	3,390	Approved
4	Westborough at Easton	Residential, Commercial	2.49	2.49	529.9	177.8	3949	Under Construction
5	Villages at Zinfandel (SPK-2001-00114)	Residential, Commercial	2.03	1.5	527	18	1,833	Under Construction
6	Rio del Oro (SPK-1999-00590)	Residential, Commercial, Industrial, Recreation, Schools, Open Space	73.65	27.90	1,920	521	11,601	Approved
7, 8	North Douglas I and II (SPK-1994-00218)	Low Density Residential, Open Space	5.36	5.36	162.4	0	819	Approved
9	Mather East (SPK-2001-00441)	Commercial, Multi-Family Open Space	3.07	0.39	11.9	29.1	129	Approved
10, 12	Anatolia I, II, and III (SPK-1901-10021)	Residential, Commercial, Recreational, Schools	85.07	41.05	371.5	14.5	1,714	Under Construction
13	Anatolia IV (SPK-1994-00210)	Residential	1.36	1.36	25	0	203	Approved
14	Montelena (SPK-2001-00448)	Residential, Wetland Preserve, Recreational, Fire Station	16.66	9.84	158.3	0	806	Under Construction
15	Sunridge Village Lot J (SPK-2001-00230)	Residential/Open Space	2.99	2.99	64.8	0	369	Approved
16	Sunridge Park	Low Density Residential	1.99	1.81	203.4	32.3	953	Approved
17, 18, 19, 21	Douglas 103 (SPK-1997-0006), Douglas 98 (SPK-2002-00568), ARI 208 (Grantline 208) (SPK-1994-00365), and Arista Del Sol (SPK-2004-00458)	Residential, Commercial, Office, and Natural Preserve	37.91	19.77	363.7	24	2,504	Approved
20	The Ranch at Sunridge	Residential, Village Center, Parks, Wetland Preserve	21.42	15.65	303.5	N/A	2,681	Pending – Under CEQA Review
22	SunCreek (SPK-2005-00888)	Residential, Village Center, Parks, Wetland Preserve			555.8	82.3	4,697	Pending – Under NEPA Review

**Table 3.0-2
Related Residential/Commercial Actions in Eastern Sacramento County and the City of Rancho Cordova**

Map Key	Development (USACE ID Number)	Type of Development	Total Waters of the U.S. (Approximate)	Affected Acres of Waters of the U.S. (Approximate)	Residential Acreage	Commercial Acreage	Units	Current Status
23	Jackson Township 900 Excelsior Estates (SPK-2004-00791)	Residential	53.38 39.84	45.68 28.77	368.24	79.157	3,959 4,400	NOI Prepared
24	Arboretum (SPK-2007-00133)	Residential, Parks, Schools, Commercial	116.86	31.75	616	44.5	5,002	NOI Prepared
26	Heritage Falls	Residential, schools, commercial	6.85	6.85	173	N/A	960	Future
27	Folsom South of U.S. 50 (SPK-2007-02159)	Residential, Commercial, Open Space	84.94	40.75	1,477	363	10,210	Approved
28	Teichert Quarry (SPK-2003-00050)	Mining	7.41	3.63				Pending
30	Stoneridge Quarry	Mining	42.896	10.419				Pending
29	Sacramento GreenCycle	Green Waste Recycling						Approved
31	Kiefer Landfill Special Planning Area ¹	Landfill, Habitat Preserve, Industrial			N/A	N/A	N/A	NOP Issued
32	Mather Specific Plan (SPK-2002-00561)	Residential	138	30		850	3,700	Application has not yet been initiated, but EIS has been prepared.
33	NewBridge Specific Plan (East Sacramento Ranch, SPK- 2003-669)	Residential, Office, Commercial, Mixed Use, Rendering Plant	22.23	4.48	369	49	3,635	Proposed

Note: N/A = not applicable or data not available, U.S. 50 = U.S. Highway 50

¹ The Kiefer Special Planning Area would include land use designations of General Agriculture, Public & Quasi Public, and a Waste Stream Industry District.

Sources: City of Rancho Cordova 2010; County of Sacramento 2010a; County of Sacramento 2010b; data compiled by AECOM in 2014

4.2.3 SECTION 3.3, “AIR QUALITY”

Page 3.3-2, the 2nd paragraph has been modified as follows:

In the winter, temperature inversions dominate during the night and early morning hours, but frequently dissipate by afternoon. The greatest pollution problems during this time of year are from ~~carbon monoxide (CO)~~ particulate matter with aerodynamic diameter less than 2.5 microns (PM_{2.5}) and NO_x. Although SMAQMD rarely has exceedances of the state or federal carbon monoxide (CO) standard, High CO concentrations can occur on winter days with strong surface inversions and light winds, because CO transport is extremely limited.

Page 3.3-2, the first sentence of the 3rd full paragraph has been modified as follows:

EPA has established primary and secondary national ambient air quality standards (NAAQS) for the following criteria air pollutants: ozone, CO, NO₂, SO₂, respirable particulate matter (PM₁₀), ~~fine particulate matter (PM_{2.5})~~, and lead.

Page 3.3-9, the following changes were made to the first row of Table 3.3-3:

Table 3.3-3 Summary of Annual Ambient Air Quality Data (2010–2012)^a			
	2010	2011	2012
Ozone (7520 Sloughhouse Road, Sloughhouse, 2 miles south)			
Maximum <u>federal ozone standard</u> concentration (1-hour/8-hour average, ppm)	0.121/0.104	0.123/0.094	0.125/0.107/106
Number of days state 1-hour standard exceeded	3	9	10
Number of days 8-hour standard exceeded (state/national)	13/8	27/19	25/18

The last paragraph beginning on page 3.3-16 has been modified as follows:

Sacramento County is also part of the Sacramento Federal Ozone Nonattainment Area (SFNA), which also comprises all of Yolo County and portions of Placer, and Solano Counties. As a nonattainment area, the region is also required to submit rate-of-progress milestone evaluations in accordance with the CAAA. Milestone reports were prepared for 1996, 1999, 2002, 2006, and most recently in 2008-2011 for the 1997 8-hour ozone standard. ~~The most recent 2008 milestone report~~ 2006 Rate of Progress Plan demonstrated that the Sacramento Region has met the requirement of reducing volatile organic compounds (VOC) by 15 percent from 1990 to 1996.

Page 3.3-17, the last sentence of the 2nd full paragraph has been modified as follows:

...The PM_{2.5} Plan was submitted to ~~EPA-ARB~~ in December 2013, and ~~EPA~~ is scheduled to ~~announce final designations by December 14, 2014~~ be updated in 2015 for submittal to EPA.

Page 3.3-22, paragraph 4 has been modified as follows:

Table 3.3-6 presents the Proposed Action's annual construction emissions. It should be noted that this analysis conservatively compares total construction emissions (i.e., direct and indirect emissions) of all pollutants against the applicable *de minimis* thresholds. ~~However, a~~ General Conformity analysis is typically only applicable to a project's direct emissions in an attainment area. Direct emissions are those generated as a result of the Federal action. In this case, the direct construction emissions are those resulting from earth fill activities, ~~which would be less than the values shown in Table 3.3-6.~~ However, because the project is located in a nonattainment area for ozone and PM_{2.5}, this analysis conservatively evaluates total construction emissions (i.e., direct and indirect emissions) of all pollutants against the applicable *de minimis* thresholds.

Page 3.3-23, the following text has been added to note "a" in Table 3.3-6:

^a Annual construction emissions were estimated assuming 10 percent of the total land uses are constructed in a single year, which represents a conservative estimate of annual construction emissions. Emissions shown represent the direct and indirect emissions associated with construction of the Proposed Action, which would all be subject to the general conformity *de minimis* thresholds.

Page 3.3-24, the paragraph preceding the 2nd bulleted list has been modified as follows:

In addition to the Final EIR mitigation measures listed above, the Proposed Action also prepared an Air Quality Mitigation Plan (AQMP) that was approved by SMAQMD. Typically, SMAQMD requires that projects achieve 15 mitigation points for the AQMP; however, because the Proposed Action is not included in the SIP, SMAQMD recommended and the County required that the project achieve 35 mitigation points for the AQMP. The AQMP requires compliance with the following mitigation measures (see Appendix F of this EIS for a full and complete copy of the AQMP):

Page 3.3-25, the paragraph immediately preceding Table 3.3-7 (first paragraph on page 3.3-25) has been modified as follows:

SMAQMD determined that implementation of the above measures for the operational phase of the Proposed Action would result in a grand total of ~~51.47~~35.29 mitigation points, for an operational emission reduction of ~~51.47~~35.29 percent. SMAQMD's emissions reduction goal for the Proposed Action was 35 mitigation points or a 35 percent reduction. Importantly, SMAQMD and the County further required that the Proposed Action achieve the same 35 mitigation points in the case the university is not developed to account for the loss in trip capture that the university would have provided. Therefore, additional mitigation measures were added to the AQMP and SMAQMD confirmed ~~determined~~ that even if there were no university user at the Proposed Action, these mitigation measures would still result in ~~a 51.47~~the required 35 percent reduction in emissions and still meet the emissions reduction goal. See Table 3.3-7 for the Proposed Action's unmitigated and mitigated annual operational emissions.

4.2.4 SECTION 3.4, "BIOLOGICAL RESOURCES"

Page 3.4-32, Table 3.4-4 has been revised as follows:

Table 3.4-4 Summary of Direct Off-Site Wetland Effects from Proposed Roadways					
DUE Trigger	Roadway Location	Vernal Pool Effect (acres)	Stock Pond Effect (acres)	Swale, Stream, and Creek Effects (acres)	Roadside Ditch Effect (acres)
Connect	Intersection of Grant Line Road and Chrysanthy Boulevard	0	<u>0.005</u>	0.024 <u>0.019</u>	0
Connect	Intersection of Grant Line and North Loop Road	0.006	0.01	<u>0.0035</u>	0
Connect	Intersection of Grant Line Road and University Boulevard	0.026	0	0.003	0
250	Intersection of Sunrise Boulevard and Jackson Highway/SR 16	0	0	0.085	0.014
500 <u>250</u>	Intersection of Jackson Highway/SR 16 and Grant Line Road	0.004	0.084 <u>0.010</u>	0.057 <u>0.128</u>	0
850	Intersection of Grant Line Road and Douglas Road	0.034 <u>0.045</u>	0	0	0
1,250	Intersection of North Loop Road and Grant Line Road	0	0	0.001	0
1,800	Intersection of North Loop Road and Grant Line Road	0	0	0.001	0
1,800	Intersection of Grant Line Road and Douglas Road	0.014	0	0	0
Subtotals		<u>0.081</u>	<u>0.0295</u>	<u>0.2417</u>	<u>0.10014</u>
Total Off-Site Road Effects on Wetlands			0.36		
Note: DUE = dwelling unit equivalent; SR = State Route Source: Data compiled by AECOM in 2014					

Page 3.4-42, the following text has been added to the second full paragraph:

Implementation of Mitigation Measures 3.10-1, 3.4-1a, and 3.4-1b would reduce direct and indirect significant effects associated with fill and degradation of jurisdictional habitat under the Proposed Action. However, because wetland establishment or re-establishment could have adverse effects to existing wetlands on proposed mitigation sites, and a final compensatory mitigation plan has not been approved by USACE, a determination cannot be made on whether the proposed compensatory mitigation would reduce these direct and indirect effects to a less than significant level. Therefore, **direct** and **indirect** effects would remain **potentially significant and unavoidable** even with implementation of Sacramento County Mitigation Measures BR-1, BR-2, BR-8, and BR-9 and Mitigation Measures 3.10-1, 3.4-1a, and 3.4-1b.

4.2.5 SECTION 3.5, “GREENHOUSE GAS EMISSIONS”

Page 3.5-20, the 2nd paragraph was revised as follows:

GHG emission effects would be reduced, but not to a less-than-significant level because ~~there are~~ no other mitigation measures have been identified that would reduce the amount of operational GHG emissions. Therefore, this effect would remain **significant and unavoidable**.

This page intentionally left blank.