CITY OF VISALIA
WATER CONSERVATION PLANT
UPGRADES PROJECT
FINAL ENVIRONMENTAL IMPACT REPORT

State Clearinghouse No. 2010081057

PREPARED FOR:

City of Visalia
7579 Avenue 288
Visalia, CA 93277
Contact: James Ross
559-713-4466

PREPARED BY:

ICF International
5558 California Avenue, Suite 310
Bakersfield, CA 93309
Contact: Steven Esselman
661-859-1852

January 2013

ICF INTERNATIONAL

ICF International. 2013. City of Visalia Water Conservation Plant Upgrades Project Final Environmental Impact Report. Draft. December. (ICF Project 00663.09.) Bakersfield, CA. Prepared for City of Visalia, Visalia, CA.

Contents

Chapter 1 Introduction 1-1

Purpose of This Final Environmental Impact Report 1-1

Process of This Final Environmental Impact Report 1-2

Chapter 2 Responses to Comments 2-1

Introduction 2-1

Comments Received 2-2

Comments on September 2011 Draft Environmental Impact Report 2-2

Comments on Recirculated Draft Environmental Impact Report 2-3

Comments and Responses to Comments 2-3

A. Dave Singleton, Program Analyst, Native American Heritage Commission (October 3, 2011) 2-8

B. David Deel, Associate Transportation Planner, California Department of Transportation, District 6 (October 5, 2011) 2-10

C. Jeffrey Single, Regional Manager, California Department of Fish and Game, Central Region (November 9, 2011) 2-19

D. Mike Oliphant, Environmental Project Manager, Chevron Environmental Management Company (November 10, 2011) 2-28

E. Aaron Fukuda, District Engineer, Tulare Irrigation District (November 10, 2011) 2-30

F. Michael Spata, Assistant Planning Director, County of Tulare Resource Management Agency (November 10, 2011) 2-34

G. Lisa Lee, Environmental Scientist, State Water Resources Control Board (November 10, 2011) 2-45

H. Scott Morgan, Director, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (November 10, 2011) 2-57

I. Arnaud Marjollet, Permit Services Manager, San Joaquin Valley Air Pollution Control District (November 15, 2011) 2-60

J. W. Dale Harvey, Senior WRC Engineer, Central Valley Regional Water Quality Control Board (December 1, 2011) 2-64

K. Allison Shuklian, Environmental Health Specialist, Tulare County Health and Human Services Agency (November 5, 2012) 2-68

L. David Deel, Associate Transportation Planner, California Department of Transportation, District 6 (November 5, 2012) 2-73

M. Arnaud Marjollet, Permit Services Manager, San Joaquin Valley Air Pollution Control District (December 11, 2012) 2-75

N. Scott Morgan, Director, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (December 13, 2012) 2-84

Chapter 3 Errata and Clarifications to the Draft EIR 1

Introduction 1

Changes and Clarifications to the September 2011 DEIR 1

Page ES-7 1

Page 2-15 2

Page 2-16 2

Page 3B-15 2

Page 3B-15 3

Page 3B-16 3

Page 3I-6 3

Page 8-1 4

Changes and Clarifications to the Recirculated DEIR 4

ATTACHMENTS

1 California Department of Fish and Game 2012 Staff Report on Burrowing Owl Mitigation

2 State Revolving Fund and CEQA-Plus Brochure

Chapter 1

Introduction

Chapter 1
Introduction

Purpose of This Final Environmental Impact Report

The City of Visalia (City), as the Lead Agency under the California Environmental Quality Act (CEQA), has prepared this Final Environmental Impact Report (Final EIR) for the proposed City of Visalia Water Conservation Plant Upgrades Project (SCH No. 2010081057). This Final EIR includes all of the contents required as outlined in Section 15132 of the State CEQA Guidelines, including:

- The September 2011 Draft Environmental Impact Report (September 2011 DEIR) and recirculated DEIR (collectively, the Draft EIR) or a revision to the draft.
- Comments and recommendations received on the Draft EIR.
- A list of persons, organizations, and public agencies commenting on the Draft EIR.
- The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- Any other information added by the Lead Agency.

This Final EIR for the project consists of comments and responses to comments, and errata for the Draft EIR. This Final EIR is intended to be used along with the Draft EIR, which is incorporated by reference and bound separately.

The September 2011 DEIR was prepared for the project and circulated for public review from September 26, 2011, through November 10, 2011. The recirculated DEIR was prepared and circulated from October 29, 2012, through December 13, 2012. Comments were received during the two public review periods. Copies of these letters are provided in Chapter 2, *Comments Received and Responses to Comments*, of this Final EIR.

The City may also adopt Findings of Fact and a Statement of Overriding Considerations if its deliberations concerning the project result in approval of the project.

This Final EIR assembles all the environmental data and analyses that have been prepared for the proposed project, including public and agency comments on the Draft EIR and responses by the City to those comments. The Draft EIR and technical appendices are available for public review at the Visalia Water Conservation Plant, 7579 Avenue 288, Visalia, CA 93277. The intent of the Final EIR is to provide a forum to air and address comments pertaining to the analysis contained in the Draft EIR and to provide an opportunity for clarification, corrections, or minor revisions to the Draft EIR as needed.

The evaluation and response to comments is an important part of the CEQA process because it allows the following:

- The opportunity to review and comment on the methods of analysis contained in the Draft EIR.
- The ability to detect any omissions that may have occurred during the preparation of the Draft EIR.
- The ability to check for accuracy of the analysis contained within the Draft EIR.

- The ability to share expertise.
- The ability to discover public concerns.

Process of This Final Environmental Impact Report

The September 2011 DEIR was distributed to various public agencies, organizations, and individuals on September 26, 2011, for a 45-day public review period established by the Governor's Office of Planning and Research, State Clearinghouse. The review period for the September 2011 DEIR ended on November 10, 2011. The recirculated DEIR was also distributed to various public agencies, organizations, and individuals for an additional 45-day public review period (October 29, 2012, through December 13, 2012). The City used several methods to elicit comments on the Draft EIR. The Notices of Availability (NOAs) for both the September 2011 DEIR and recirculated DEIR were mailed to various agencies and organizations and to individuals that had previously requested such notice, and the NOAs were posted at the Tulare County Clerk's office. Additionally, a Public Hearing to solicit comments about the adequacy of the September 2011 DEIR was held on November 10, 2011, 3:30 to 5:30 p.m., at City Hall, 707 West Acequia Avenue, Visalia, California 93291. Two written comment letters were received at the Public Hearing and responses to the comments can be found in Chapter 2 of this Final EIR.

The Draft EIR was available for public review on the City's website (http://www.ci.visalia.ca.us/depts/public_works/waste_water.asp) or at one of the locations listed below.

City Corporation Yard
336 N. Cain Street
Visalia, CA 93292

Visalia City Hall West
707 West Acequia Avenue
Visalia, CA 93291

Visalia Transit Center
425 E. Oak Street, 3rd Floor
Visalia, CA 93291

Visalia Water Conservation Plant
7579 Avenue 288
Visalia, CA 93277

Supporting documents not included in the Draft EIR were available for public review at the Visalia Water Conservation Plant, 7579 Avenue 288, Visalia, CA 93277.

Pursuant to Section 15088 of the State CEQA Guidelines, the City, as the Lead Agency for the project, has reviewed all comments received on the Draft EIR. Responses to these comments are contained within Chapter 2, *Comments Received and Responses to Comments*, of this Final EIR. Any revisions to the Draft EIR based on these comments are presented in Chapter 3, *Errata to the Draft EIR*, of this Final EIR in revision-mode text (i.e., deletions are shown with ~~strikethrough~~ and additions are shown with <u>underline</u>).

Chapter 2

Responses to Comments

Chapter 2
Responses to Comments

Introduction

In accordance with Section 15088 of the California Environmental Quality Act (CEQA) Guidelines, the City of Visalia (City or Lead Agency) has evaluated the comments received on the September 2011 DEIR and the recirculated DEIR (collectively, the Draft EIR) for the City of Visalia Water Conservation Plant Upgrades Project (proposed project) (State Clearinghouse No. 2010081057) and has prepared written responses to these comments. The September 2011 DEIR was recirculated because significant new information regarding the proposed project was presented during the public review process.

The September 2011 DEIR for the proposed project was sent out for 45-day public review from September 26, 2011, through November 10, 2011, as required by CEQA. A comment letter (Comment Letter J) received from the Central Valley Regional Water Quality Control Board (Central Valley RWQCB) during the public review process stated that although the September 2011 DEIR addresses the project's effects on groundwater elevations, it does not include information about the project's effects on groundwater quality. Specifically, the Central Valley RWQCB said that the EIR "must assess compliance of the proposed discharges with [State Water Resources Control Board] SWRCB Resolution No. 68-15, Statement of Policy with Respect to Maintaining High Quality of Waters in California (Antidegradation Policy)." The Central Valley RWQCB comment letter goes on to say that a constituent-by-constituent analysis should be performed to compare the quality of the effluent generated by the plant as it reaches underlying groundwater with the quality of natural groundwater. To address the Central Valley RWQCB's concerns regarding the proposed project and its effect on groundwater quality, the City prepared an antidegradation analysis for the proposed project (Appendix A of the recirculated DEIR). The conclusions of this analysis were detailed in Section 3B, *Hydrology and Water Quality*, of the recirculated DEIR.

Also during the public review period, the State Water Resources Control Board (SWRCB) stated in a comment letter (Comment Letter G) that the EIR should discuss the direct and indirect effects of decreased discharges of effluent into Mill Creek as a result of the proposed project on biological resources and habitat. In response to this comment, the City had a biologist perform a reconnaissance survey of Mill Creek, from the effluent discharge point to about 3 miles downstream of the current effluent discharge point into Mill Creek. The results of the survey can be found in Section 3A, *Biological Resources*, of the recirculated DEIR.

Subsequent to the public review period for the September 2011 DEIR, the City proposed entering into a water exchange agreement with the Tulare Irrigation District (TID). A summary outline of the proposed water exchange agreement can be found in Appendix B of the recirculated DEIR. In addition, the agreement is discussed in Chapter 2, *Project Description*, of the recirculated DEIR. Impacts resulting from the water exchange agreement were discussed throughout the recirculated DEIR.

In the City's view, the antidegradation analysis and reconnaissance biological survey were considered "additional data," and the proposed water exchange was considered a "change in the project," per State CEQA Guidelines Section 15088.5(a). It was also the City's view that the antidegradation analysis, reconnaissance survey, and proposed water exchange were "significant" changes to the EIR analysis and project description. Information regarding the changes was not

included in the September 2011 DEIR. Therefore, these changes warranted recirculation of the September 2011 DEIR to afford the public a meaningful opportunity to comment on these new aspects of the EIR and the proposed project.

This chapter provides copies of the comments received during the public review processes for both the September 2011 DEIR distributed for a 45-day public review (September 26, 2011, through November 10, 2011) and the recirculated DEIR distributed for an additional 45-day public review period (October 29, 2012, through December 13, 2012), and provides an evaluation and written responses for each of these comments.

Comments Received

During the public review period for the September 2011 DEIR, the City received 10 comment letters from government agencies. During the public review period for the recirculated DEIR, the City received four additional comment letters. The commenting parties are listed below. Comment letters E and F were presented by agency representatives during the Public Hearing for the September 2011 DEIR held on November 10, 2011, 3:30 to 5:30 p.m., at City Hall, 707 West Acequia Avenue, Visalia, California 93291. No verbal comments were voiced at the Public Hearing. Each of the commenting parties is labeled with a letter, which corresponds to the comment letters and the responses to comments provided herein.

Comments on September 2011 Draft Environmental Impact Report

A. Dave Singleton, Program Analyst, Native American Heritage Commission (October 3, 2011)

B. David Deel, Associate Transportation Planner, California Department of Transportation, District 6 (October 5, 2011)

C. Jeffrey Single, Regional Manager, California Department of Fish and Game, Central Region (November 9, 2011)

D. Mike Oliphant, Environmental Project Manager, Chevron Environmental Management Company (November 10, 2011)

E. Aaron Fukuda, District Engineer, Tulare Irrigation District (November 10, 2011)

F. Michael Spata, Assistant Planning Director, County of Tulare Resource Management Agency (November 10, 2011)

G. Lisa Lee, Environmental Scientist, State Water Resources Control Board (November 10, 2011)

H. Scott Morgan, Director, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (November 10, 2011)

I. Arnaud Marjollet, Permit Services Manager, San Joaquin Valley Air Pollution Control District (November 15, 2011)

J. W. Dale Harvey, Senior WRC Engineer, Central Valley Regional Water Quality Control Board (December 1, 2011)

Comments on Recirculated Draft Environmental Impact Report

K. Allison Shuklian, Environmental Health Specialist, Tulare County Health and Human Services Agency (November 5, 2012)

L. David Deel, Associate Transportation Planner, California Department of Transportation, District 6 (November 5, 2012)

M. Arnaud Marjollet, Permit Services Manager, San Joaquin Valley Air Pollution Control District (December 11, 2012)

N. Scott Morgan, Director, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (December 13, 2012)

Comments and Responses to Comments

This section includes responses to all written comments on the Draft EIR received by the City in accordance with Section 15088 of the State CEQA Guidelines. In accordance with the State CEQA Guidelines, responses are prepared for these comments that address the sufficiency of the document regarding the identification of environmental impacts and methods to avoid or mitigate those impacts. When responding to comments, Lead Agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the Draft EIR. Additionally, please note that comments by a public agency should be limited to those aspects of a project that are within its area of expertise or which are required to be carried out or approved by the agency, and such comments must be supported by substantial evidence (State CEQA Guidelines Section 15204).

Where applicable, revisions to the Draft EIR associated with the responses to comments are provided in Chapter 3, *Errata and Clarification to the Draft EIR*, of this Final EIR.

Comment Letter A

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

October 3, 2011

Mr. James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 92177

Re: SCH#2010081057; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the **"City of Visalia Water Conservation Plan Upgrades Project;"** located in Tulare County, California

Dear Mr. Ross:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604). The NAHC wishes to comment on the proposed project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

A-1 The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including …objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: **Native American cultural resources were not identified** within the USGS coordinates identified. However, the absence of archaeological resources does not preclude their existence.

The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural

significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Special reference is made to the *Tribal Consultation* requirements of the California 2006 Senate Bill 1059: enabling legislation to the federal Energy Policy Act of 2005 (P.L. 109-58), mandates consultation with Native American tribes (both federally recognized and non federally recognized) where electrically transmission lines are proposed. This is codified in the California Public Resources Code, Chapter 4.3 and §25330 to Division 15.

Furthermore, pursuant to CA Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

A-1 cont.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

2

A-1 cont. If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

Native American Contacts
Tulare County
October 3, 2011

Santa Rosa Rancheria
Rueben Barrios, Chairperson
P.O. Box 8
Lemoore , CA 93245
(559) 924-1278
(559) 924-3583 Fax
Tache
Tachi
Yokut

Tubatulabals of Kern Valley
Donna Begay, Tribal Chairwoman
P.O. Box 226
Lake Isabella, CA 93240
drbegay@aol.com
(760) 379-4590
(760) 379-4592 FAX
Tubatulabal

Tule River Indian Tribe
Ryan Garfield, Chairperson
P.O. Box 589
Porterville , CA 93258
chairman@tulerivertribe-nsn.
(559) 781-4271
(559) 781-4610 FAX
Yokuts

Wukchumni Tribe
John Sartuche
929 N. Lovers Lane
Visalia , CA 93292
signsbysarch@aol.com
(559) 636-1136
Wukchumni

Sierra Nevada Native American Coalition
Lawrence Bill, Interim Chairperson
P.O. 125
Dunlap , CA 93621
(559) 338-2354
Mono
Foothill Yokuts
Choinumni

Jennifer Malone
637 E Lakeview
Woodlake , CA 93286
indianpopup@sbcglobal.net
559-564-2146 - home
559-280-0712 - cell
Wukchumni
Tachi
Yowlumni

Esohm Valley Band of Indians/Wuksache Tribe
Kenneth Woodrow, Chairperson
1179 Rock Haven Ct.
Salinas , CA 93906
kwood8934@aol.com
831-443-9702
Foothill Yokuts
Mono

Santa Rosa Tachi Rancheria
Lalo Franco, Cultural Coordinator
P.O. Box 8
Lemoore , CA 93245
(559) 924-1278 - Ext. 5
(559) 924-3583 - FAX
Tachi
Tache
Yokut

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2010081057; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the City of Visalea Water Conservation Plan Upgrades Project; located in Tulare County, California.

A. Dave Singleton, Program Analyst, Native American Heritage Commission (October 3, 2011)

Response to Comment A-1

The City appreciates the Native American Heritage Commission's (NAHC's) time and effort in reviewing the September 2011 DEIR and providing comments about its content. The commenter states that the NAHC is the Trustee Agency for the protection and preservation of Native American cultural resources, pursuant to California Public Resources Code Sections 21070, 5097.9, and 21000 through 21177 as well as other codes. The commenter goes on to state that the NAHC searched its Sacred Lands File and determined that Native American cultural resources have not been identified within the U.S. Geological Survey coordinates for the project.

The comments have been noted for the record.

Comment Letter B

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 6
1352 WEST OLIVE AVENUE
P.O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 488-7396
FAX (559) 488-4088
TTY (559) 488-4066

Flex your power!
Be energy efficient!

October 5, 2011

2135-IGR/CEQA
6-TUL-99-38.032 +/-
DEIR
CITY OF VISALIA
WATER CONSERVATION PLANT UPGRADES
SCH# 2010081057

Mr. James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Dear Mr. Ross:

B-1 Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the Water Conservation Plant Upgrades Project. The existing wastewater treatment plant is located at the southeast corner of the intersection of Road 68 and Avenue 288. The proposed recycled water conveyance system would extend away from the treatment plant to the southwest and east. The eastern alignment of the conveyance system would extend away from the southern fence line of the plant, continue east, go under State Route (SR) 99 and traverse the southern boundary of the Visalia Municipal Airport. At the southeastern of corner of the airport, the conveyance system would split into three arms, with one arm going to the north along Plaza Drive and terminating just south of the intersection of State Route 198 and Plaza Drive. Caltrans has the following comments:

The previous Caltrans comments dated 10/1/2010 (as included in the DEIR) continue to be valid.

Please send a response to our comments prior to staff's recommendations to the Planning Commission and/or the City Council. Also please provide a copy of the resolution approving the project. If you have any questions, please call me at (559) 488-7396.

Sincerely,

DAVID DEEL
Associate Transportation Planner
District 6

"Caltrans improves mobility across California"

B. David Deel, Associate Transportation Planner, California Department of Transportation, District 6 (October 5, 2011)

Response to Comment B-1

The City appreciates the California Department of Transportation's (Caltrans') time and effort in reviewing the September 2011 DEIR and providing comments about its content. The commenter states that Caltrans' comments on the Notice of Preparation/Initial Study (NOP/IS) for the project, as outlined in a comment letter dated October 1, 2010 (see Appendix B of the September 2011 DEIR), are still valid. In that comment letter, Caltrans states that an encroachment permit must be obtained for all proposed activities that may encroach upon state highway rights-of-way. The letter states that all work is to be performed to state standards at no cost to the state and that all plans, calculations, specifications, etc., are to be stamped and signed by a licensed engineer or architect who has been approved by Caltrans. The letter also states that if landscaping is eliminated or disturbed, the replacement landscaping must meet current standards and be approved as part of the landscape permit process. Additionally, the letter states that a landscape maintenance agreement must accompany the permit application and be approved prior to issuance of the landscape permit. The letter states that dust control measures shall be implemented and that a preliminary cost estimate must be submitted with the encroachment permit application. Finally, the letter states that proposed jack-and-bore operations must meet the requirements of the *Caltrans Encroachment Permit Manual*, Section 623.

The City concurs with Caltrans' recommendations and will implement the recommendations as part of the project. On pages 3I-5 and 3I-6 of the September 2011 DEIR, the City states that it will meet all Caltrans requirements specified in the NOP/IS comment letter dated October 10, 2010.

NOV-28-11 11:19 FROM-DFG 559 2433004 T-663 P.002/009 F-442

DEPARTMENT OF FISH AND GAME
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
http://www.dfg.ca.gov

CHARLTON H. BONHAM, Director

Comment Letter C

November 9, 2011

James Ross
City of Visalia
7579 Avenue 288
Visalia, California 93277

Subject: Draft Environmental Impact Report
Water Conservation Plant Upgrades Project
SCH No. 2010081057

Dear Mr. Ross:

The California Department of Fish and Game (Department) has reviewed the Draft Environmental Impact Report (DEIR) submitted by the City of Visalia (City) for the above Project. Approval of the Project would allow for the improvement of wastewater treatment facilities at the City's existing water conservation plant and would develop the initial recycled water pipeline infrastructure for disposal and reuse of treated effluent generated by the plant. In addition, the City is exploring the possibility of entering into water exchange agreements to exchange recycled water generated by the plant for surface water. The Project site is located in the northwestern portion of Tulare County, about 2 miles west of the Visalia urban area.

C-1 The Department is concerned that construction activities could result in impacts to special-status species known to occur in the Project area including, but not limited to, the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State threatened Swainson's hawk (*Buteo swainsoni*), and the State Species of Special Concern burrowing owl (*Athene cunicularia*). The DEIR recognizes the potential impacts to wildlife in the implementation of the Project and has proposed avoidance and minimization measures intended to reduce impacts to San Joaquin kit fox, Swainson's hawk, and burrowing owl. However, some additional avoidance, minimization, and mitigation are warranted for these species. In addition, while the DEIR discusses the observed location of elderberry bushes (*Sambucus mexicanus*), the host plant for the federally threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), the DEIR does not address the potential impacts to the species in the event the host plant needs to be trimmed or removed in the implementation of the Project. Therefore, Department believes further mitigation measures, in addition to those listed in the DEIR, are necessary to reduce the Project-related impacts to all the above species to less than significant levels. Therefore, the Department has the

Conserving California's Wildlife Since 1870

C-1 cont. following recommendations that should be incorporated into the Final Environmental Impact Report (EIR). Our comments follow.

Department Jurisdiction

Trustee Agency Authority: The Department is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA) for commenting on projects that could impact plant and wildlife resources. Pursuant to Fish and Game Code Section 1802, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species. As a Trustee Agency for fish and wildlife resources, the Department is responsible for providing, as available, biological expertise to review and comment upon environmental documents and impacts arising from project activities, as those terms are used under CEQA (Division 13 (commencing with Section 21000) of the Public Resources Code).

C-2

Responsible Agency Authority: The Department has regulatory authority over projects that could result in the "take" of any species listed by the State as threatened or endangered, pursuant to Fish and Game Code Section 2081. If the Project could result in the "take" of any species listed as threatened or endangered under the California Endangered Species Act (CESA), the Department may need to issue an Incidental Take Permit (ITP) for the Project. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (sections 21001(c), 21083, Guidelines sections 15380, 15064, 15065). Impacts must be avoided or mitigated to less than significant levels unless the CEQA Lead Agency makes and supports a Statement of Overriding Consideration (SOC). The CEQA Lead Agency's SOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code Section 2080. The Project has the potential to reduce the number or restrict the range of endangered, rare, or threatened species (as defined in Section 15380 of CEQA).

C-3 **Unlisted Species:** Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or Federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T, as specified in the CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15380), it should be fully considered in the environmental analysis for the Project. Burrowing owl could occur in the Project area.

C-4 **Bird Protection:** The Department has jurisdiction over actions which may result in the disturbance or destruction of active nest sites or the unauthorized "take" of birds. Fish and Game Code sections that protect birds, their eggs, and nests include sections 3503

(regarding unlawful "take," possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the "take," possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful "take" of any migratory nongame bird). Appropriate avoidance and minimization measures for raptors and other nesting birds in the Project area should be included in the CEQA document prepared for this Project.

C-4 cont.

Stream Alteration Agreement (SAA): The Department also has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource, pursuant to Fish and Game Code sections 1600 et seq. The DEIR discusses that the proposed Project would impact Mill Creek. The Project proponent should submit a Stream Alteration Notification to the Department for the Project. The Department is required to comply with CEQA in the issuance or the renewal of an SAA. For additional information on notification requirements, please contact our staff in the Stream Alteration Program at (559) 243-4593.

C-5

Water Pollution: Pursuant to Fish and Game Code Section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into the "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible this Project could result in pollution of a "Waters of the State" from placing a trench and pipeline across Mill Creek. This could impact the fish and wildlife resources by causing increased sediment input into "Waters of the State" downstream of the Project. The Regional Water Quality Control Board also has jurisdiction regarding discharge and pollution to "Waters of the State" including stormwater runoff into surface waters.

Potential Project Impacts and Recommendations

San Joaquin Kit Fox (SJKF): A known occurrence record documents SJKF within four miles of the Project site. SJKF populations are known to den in right-of-ways, vacant lots, parks, landscaped areas, golf courses, etc., and population numbers fluctuate over years. Presence/absence in any one year does not necessarily depict the potential for kit fox to occur on a site. This is true for many other listed species in the San Joaquin Valley. It is important to note that SJKF may be attracted to the construction and disposal areas of the site due to the type and level of activity (grading, excavation, etc.) and the loose, friable soils that are created as a result of intensive ground disturbance. The Department recommends that the United States Fish and Wildlife Service (USFWS) "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011) be followed. A pre-construction survey is recommended and a biological monitor should be present at the excavation and disposal sites to observe if SJKF has moved into the area (i.e., burrow presence). In

C-6

C-6 cont.

the event that this species is detected during surveys, consultation with the Department is warranted to discuss how to implement the Project and avoid "take," or if avoidance is not feasible, to acquire a State ITP prior to any ground-disturbing activities. The Department also recommends consulting with the USFWS on potential impacts to this species. Mitigation measures for SJKF should be fully addressed in the adopted Final EIR.

C-7

Swainson's Hawk: Known occurrence records document Swainson's hawks nesting in multiple locations within four miles of the Project area. The Project area contains mature trees that could be used as nesting habitat. To avoid impacts to the species, surveys should be conducted following the survey methodology developed by the Swainson's Hawk Technical Advisory Committee (SWHA TAC, 2000), prior to any ground disturbance. These surveys, the parameters of which were designed to optimize detectability, must be conducted to reasonably assure the Department that "take" of this species will not occur as a result of disturbance associated with Project implementation. In the event that this species is detected during protocol-level surveys, consultation with the Department is warranted to discuss how to implement the Project and avoid "take," or if avoidance is not feasible, to acquire a State ITP prior to any ground-disturbing activities.

Removal of mature trees is a potentially significant impact to nesting raptors that should be mitigated. The Department considers removal of known raptor nest trees, even outside of the nesting season, to be a significant impact under CEQA, and, in the case of Swainson's hawk, it could also result in "take" under CESA. This is especially true with species such as Swainson's hawk that exhibit high site fidelity to their nest and nest trees year after year. Regardless of nesting status, trees that must be removed should be replaced with an appropriate native tree species planting at a ratio of 3:1 in an area that will be protected in perpetuity. This mitigation is needed to offset potential impacts to the loss of potential nesting habitat.

Swainson's hawks generally forage within 10 miles of their nest tree. Due to the loss of suitable foraging habitat due to Project activities, mitigation measures compensating for losses of habitat should be included in the Final EIR. The Department's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (DFG, 1994) recommends the following:

- Projects within 1 mile of an active nest tree should provide a minimum of one acre of habitat management (HM) land for each acre of development authorized.

- Projects within 5 miles of an active nest but greater than 1 mile should provide a minimum of 0.75 acres of HM land for each acre of urban development authorized.

- Projects within 10 miles of an active nest tree but greater than 5 mile from an active nest tree should provide a minimum of 0.5 acres of HM land for each acre of urban development authorized.

C-7 cont. Funding of a sufficient long-term endowment for the management of the protected properties should be paid by the Project sponsors. In addition to fee title acquisition of grassland habitat, mitigation could occur by the purchase of conservation or suitable agricultural easements. Suitable agricultural easements would include areas limited to production of crops such as alfalfa, dry land and irrigated pasture, and cereal grain crops. Vineyards, orchards, cotton fields, and other dense vegetation do not provide adequate foraging habitat. Additionally, nest trees are an extremely limited resource in the southern San Joaquin Valley; the Department recommends that lands protected as foraging habitat for Swainson's hawks be no more than 10 miles from a Swainson's hawk nest in order to be beneficial to the species. Mitigation measures for Swainson's hawk should be fully addressed in the adopted Final EIR.

C-8 **Valley Elderberry Longhorn Beetle (VELB):** As stated previously, this federally threatened species has the potential to exist within the Project area and the vicinity. Elderberry bushes, the required host plants for VELB, were found within the Project area. Removal and trimming of elderberry bushes is regulated by the USFWS. The Project proponents should contact the USFWS for appropriate avoidance, minimization, and mitigation measures to be implemented for VELB should work occur within 100 feet of an elderberry bush.

C-9 **Burrowing Owl:** The Project has the potential to impact burrowing owl. If any ground-disturbing activities will occur during the burrowing owl nesting season (approximately February 1 though August 31), and potential burrowing owl burrows are present within the Project footprint, implementation of avoidance measures is warranted. In the event that burrowing owls are found, the Department's Staff Report on Burrowing Owl Mitigation (CDFG 1995) recommends that impacts to occupied burrows be avoided by implementation of a no-disturbance buffer zone of a minimum distance of 250 feet, unless a qualified biologist approved by the Department verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Failure to implement this buffer zone could cause adult burrowing owls to abandon the nest, cause eggs or young to be directly

impacted (crushed), and/or result in reproductive failure, in violation of Fish and Game Code and the Migratory Bird Treaty Act.

If the Project proposes to evict burrowing owls that may be present, the Department recommends passive relocation during the nonbreeding season. The CEQA document should describe all avoidance measures that would be employed in the event that owls are found on the Project site, as well as methods that would be used to evict owls from burrows. The CEQA document should specify how the impact of evicting owls would be mitigated to a less than significant level. The Department's Staff Report on Burrowing Owl Mitigation (CDFG 1995) recommends that foraging habitat be acquired and permanently protected to offset the loss of foraging and burrow habitat. The Department also recommends replacement of occupied burrows with artificial burrows as mitigation for the potentially significant impact of evicting a burrowing owl.

C-9 cont.

Other Nesting Birds: Ground-nesting birds have the potential to exist on the Project site. If Project-related activities must occur during the breeding season (February through mid-September), surveys for active nests should be conducted by a qualified biologist no more than 30 days prior to commencing Project-related activities. A minimum no-disturbance buffer of 250 feet should be delineated around active nests until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.

C-10

More information on survey and monitoring protocols for sensitive species can be found at the Department website (www.dfg.ca.gov/wildlife/nongame/survey_monitor.html). If you have any questions on these issues, please contact Reagen O'Leary, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014, extension 244, or by electronic mail at roleary@dfg.ca.gov.

Sincerely,

for Jeffrey R. Single, Ph.D.
Regional Manager

cc: See Page Seven

cc: United States Army Corps of Engineers
San Joaquin Valley Office
1325 J Street
Sacramento, California 95814-2922

Regional Water Quality Control Board
Central Valley Region
1685 E Street
Fresno, California 93706-2020

United States Fish and Wildlife Service
2800 Cottage Way, Suite W-2605
Sacramento, California 95825

Literature Cited

DFG, 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo Swainsoni*) in the Central Valley of California. California Department of Fish and Game.

DFG, 1995. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game.

SWHA TAC, 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California Central Valley. Swainson's Hawk Technical Advisory Committee.

USFWS, 2011. Standard Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance. United States Fish and Wildlife Service.

C. Jeffrey Single, Regional Manager, California Department of Fish and Game, Central Region (November 9, 2011)

Response to Comment C-1

The City appreciates the California Department of Fish and Game's (DFG's) time and effort in reviewing the September 2011 DEIR and providing comments about its content. The commenter offers an overview of the project, noting that it provides wastewater treatment improvements at the plant, develops the initial infrastructure for a recycled water pipe, and explores the possibility of entering into water exchange agreements in the future. The commenter expresses concern that construction activities could result in impacts on special-status species (e.g., San Joaquin kit fox, Swainson's hawk, burrowing owl). While acknowledging that the September 2011 DEIR analyzes potential impacts and provides avoidance and minimization measures for special-status species, DFG recommends that additional mitigation be implemented to protect these species. Also, the commenter states that additional mitigation for potential impacts on the federally threatened valley elderberry longhorn beetle (VELB) is necessary. The commenter goes on to state that recommendations in the department's letter should be incorporated.

The City has responded to DFG's recommendations, as outlined below. The comments have been noted for the record.

Response to Comment C-2

The commenter states that DFG is a Trustee and Responsible Agency under CEQA and therefore responsible for commenting on projects that could affect plant and wildlife resources. The commenter also states that DFG has the authority to regulate projects that could result in a take of threatened or endangered species, pursuant to California Fish and Game Code. The commenter notes that burrowing owl is an "unlisted species" that should have been considered in the September 2011 DEIR.

The Lead Agency acknowledges DFG's legal authority per CEQA and the California Fish and Game Code.

Response to Comment C-3

The commenter states that "unlisted species," such as burrowing owl, should be considered in the environmental analysis for the project if it can be shown that they meet the criteria for endangered, rare, or threatened per CEQA.

Page 3B-7 of the September 2011 DEIR discusses the existing setting for burrowing owls in the project area and points out that no burrowing owls were observed during biological surveys for the project (see Appendix D of the September 2011 DEIR). Pages 3B-13 through 3B-15 of the September 2011 DEIR provide an analysis of impacts on special-status species and species of special concern, including burrowing owl. Page 3B-15 of the September 2011 DEIR states that burrowing owl has the potential to occur in the project area; therefore, the project's temporary construction-related activities could adversely affect burrowing owl. Operational impacts would not occur because improvements to the plant would be made within the existing fence line, and the proposed recycled water conveyance system would be located underground. Also on page 3B-15, the September 2011

DEIR provides mitigation (Mitigation Measure MM BIO-2) to reduce impacts on burrowing owl to less than significant. This mitigation requires the City to have a qualified biologist conduct a preconstruction survey (within 14 days of the start of construction) to determine if owl burrows are present in the project area. If burrowing owls are observed, the birds are to be relocated or no-disturbance buffers instituted per the requirements of DFG's 1995 staff report on burrowing owl mitigation. Subsequent to public review of the September 2011 DEIR, DFG provided updated guidance on burrowing owl mitigation (*California Department of Fish and Game 2012 Staff Report on Burrowing Owl Mitigation* [DFG 2012]). This updated staff report is provided in its entirety as Attachment 1 to this Final EIR. The City has revised Mitigation Measure MM BIO-2 to include recommendations from the current 2012 staff report on burrowing owl mitigation. Please see page 3B-15 in Chapter 3 for the revised mitigation measure language, which does not change the significance determinations in the September 2011 DEIR. Construction-related impacts on burrowing owl would be less than significant. The September 2011 DEIR concluded that there would be no operational impacts on burrowing owl as a result of the project beyond the baseline condition.

Response to Comment C-4

The commenter states that DFG has jurisdiction over actions that could disturb or destroy active nest sites or result in an unauthorized, per California Fish and Game Code, take of birds. The commenter states that appropriate measures pertaining to raptors and other nesting birds should be included in the EIR.

Page 3B-7 of the September 2011 DEIR discusses the existing setting for Swainson's hawk, a raptor with the potential to occur in the project area, and states that Swainson's hawks were not observed during biological surveys for the project (see Appendix D of the September 2011 DEIR). Pages 3B-15 and 3B-16 of the September 2011 DEIR provide an analysis of impacts on Swainson's hawk as well as common wildlife species, including migratory birds. The report notes that the potential exists for Swainson's hawk and common wildlife species, such as raptors and migratory birds, which are afforded protection per the California Fish and Game Code, to occur in the project area. Therefore, it recommends mitigation to reduce impacts on these species to a level of less than significant. Mitigation Measure MM BIO-3 (page 3B-15 of the September 2011 DEIR) requires, per DFG's staff report regarding mitigation of impacts on Swainson's hawk, implementation of Swainson's hawk avoidance measures during construction. Mitigation Measure MM BIO-4 (page 3B-16 of the September 2011 DEIR) requires implementation of bird avoidance measures for special-status and common species, including a preconstruction survey during the nesting season. If an active nest is found within 300 feet (500 feet for raptors) of an active construction area, then avoidance and monitoring is required. If avoidance is not possible, then construction activities must be postponed or halted until juveniles have fledged the nest. In addition, temporary barriers are to be erected to ensure that construction activities do not occur within the no-disturbance buffer. The mitigation also requires the City to provide a copy of a report that documents compliance with applicable laws, including the California Fish and Game Code, to DFG within 30 days of completion of the surveys and/or monitoring. This mitigation will reduce construction-related impacts on protected birds to a level of less than significant. The September 2011 DEIR concluded that there would be no operational impacts on protected birds as a result of the project beyond the baseline condition.

Response to Comment C-5

The commenter states that DFG has regulatory authority over activities occurring within streams and/or lakes that could adversely affect fish or wildlife resources, per California Fish and Game Code. The commenter states that the City acknowledges impacts on Mill Creek as a result of the project and that the City should submit a Stream Alteration Notification to DFG to obtain a Stream Alteration Agreement (SAA). The commenter goes on to state that project construction activities could temporarily pollute Mill Creek, a water of the State. Therefore, the project could affect wildlife resources as a result of increased sediment downstream of the project.

Page 3B-8 of the September 2011 DEIR discusses the existing setting of the project with regard to jurisdictional waters and concludes that the project would cross Mill Creek at two locations. Page 3B-17 of the September 2011 DEIR discusses the project's impact on riparian habitat and concludes that the two crossings would require permits from the U.S. Army Corp of Engineers (USACE) (per Clean Water Act [CWA] Section 404), the Central Valley RWQCB (per CWA Section 401), and DFG (per California Fish and Game Code Section 1600 et al.). Mitigation Measure MM BIO-5 (page 3B-17 of the September 2011 DEIR) requires the City to obtain appropriate permits from USACE and the Central Valley RWQCB and an SAA from DFG if it is determined by the City's Engineering Division that the possible Mill Creek crossings cannot be avoided. The mitigation goes on to require purchase of mitigation bank credits if permanent impacts on Mill Creek occur. This mitigation would reduce construction-related impacts on riparian habitat to a level of less than significant. The September 2011 DEIR concluded that there would be no operational impacts on riparian habitat as a result of the project.

Page 3B-18 of the September 2011 DEIR discusses the project's impact on wetlands and concludes that wetlands could be affected by the project at the two crossings. Mitigation Measure MM BIO-6 requires the City to avoid wetlands at the two crossings or perform a wetland delineation and revegetate the disturbance area with native wetland plant species approved by USACE and DFG or as specified in the USACE permit and/or SAA obtained from DFG. This mitigation would reduce construction-related impacts on wetlands to a level of less than significant. The September 2011 DEIR concluded that there would be no operational impacts on wetlands as a result of the project.

Response to Comment C-6

The commenter states that San Joaquin kit fox is known to occur in the project area and suggests following the U.S. Fish and Wildlife Service (USFWS) recommendations regarding kit fox, including the use of a biological monitor and, if avoidance is not feasible, consultation with DFG and USFWS about the possibility of take, prior to ground disturbance.

Page 3B-7 of the September 2011 DEIR discusses the existing setting for San Joaquin kit fox in the project area and states that no kit foxes were observed during biological surveys for the project (see Appendix D of the September 2011 DEIR). Pages 3B-13 through 3B-15 of the September 2011 DEIR provide an analysis of impacts on special-status species and species of special concern, including kit fox. On page 3B-14, the September 2011 DEIR concludes that kit fox has the potential to occur in the project area; therefore, the project's temporary construction-related activities could adversely affect San Joaquin kit fox. Operational impacts would not occur because improvements to the plant would be made within the existing fence line, and the proposed recycled water conveyance system would be located underground. Also on page 3B-14, the September 2011 DEIR provides mitigation (Mitigation Measure MM BIO-1) to reduce impacts on kit fox to a level of less than significant. This

mitigation includes requiring the City to have a qualified biologist conduct a preconstruction survey (within 60 days of the start of construction) to determine if any evidence of kit fox dens is present within the project area. If evidence of kit fox dens is observed, then a no-disturbance buffer of 50 feet for potential dens and 100 feet for known dens would be established by the qualified biologist. If avoidance is not possible, then the City would consult with DFG and USFWS for guidance, including the need for an Incidental Take Permit and authorization to hand excavate the dens. The mitigation goes on to require all pipes, culverts, or similar objects with a diameter of 4 inches or more to be thoroughly inspected to make sure that kit foxes are not present. If a kit fox is found, then such materials may not be moved until the qualified biologist deems that the kit fox has escaped and is away from possible harm. This mitigation would reduce construction-related impacts on kit fox to a level of less than significant. The September 2011 DEIR concluded that there would be no operational impacts on kit fox as a result of the project beyond the baseline condition.

Response to Comment C-7

The commenter states that Swainson's hawks are known to occur within 4 miles of the project area and that nesting trees are available in the area. The commenter also states that surveys that follow the Swainson's Hawk Technical Advisory Committee methodology should be performed to avoid impacts. The commenter goes on to state that the removal of mature trees is a significant impact under CEQA and could be considered a take; therefore, removed trees should be replaced at a ratio of 3:1, with the replacement trees protected in perpetuity. Because of the loss of suitable foraging habitat for hawks, the commenter also states that mitigation measures that compensate for the loss of suitable foraging habitat should be incorporated into the EIR, including funding for a long-term endowment for the management of protected compensating properties and the purchase of conservation or suitable agricultural easements.

Page 3B-7 of the September 2011 DEIR discusses the existing setting for Swainson's hawk in the project area and states that no Swainson's hawks were observed during biological surveys for the project (see Appendix D of the September 2011 DEIR). Pages 3B-13 through 3B-15 of the September 2011 DEIR provide an analysis of impacts on special-status species and species of special concern, including Swainson's hawk. On page 3B-15, the September 2011 DEIR concludes that Swainson's hawk has the potential to occur within the project area; therefore, the project's temporary construction-related activities could adversely affect Swainson's hawk. Operational impacts would not occur because improvements to the plant would be made within the existing fence line, and the proposed recycled water conveyance system would be located underground. Also on page 3B-15, the September 2011 DEIR provides mitigation (Mitigation Measure MM BIO-3) to reduce impacts on Swainson's hawk to a level of less than significant. This mitigation includes requiring the City to have a qualified biologist conduct a preconstruction survey to determine if any Swainson's hawks are nesting within 10 miles of the project area. If evidence of hawks is observed, then mitigation measures found in the *Staff Report Regarding Mitigation Impacts for Swainson's Hawks in the Central Valley of California* would be implemented during construction. This mitigation would reduce construction-related impacts on hawks to a level of less than significant. The September 2011 DEIR concluded that there would be no operational impacts on hawks as a result of the project beyond the baseline condition. Impacts on hawks would be temporary, and habitat would not be lost as a result of the project. Therefore, funding for a long-term endowment for the management of protected compensating properties and purchase of conservation or suitable agricultural easements is not warranted. However, the City revised Mitigation Measure MM BIO-3 to require nesting trees for Swainson's hawk that are felled as a result of the project to be replaced by the City at a ratio of 3:1,

with the replacement trees protected in perpetuity. Please see page 3B-15 in Chapter 3 for the revised mitigation measure language, which does not change the significance determinations in the September 2011 DEIR.

Response to Comment C-8

The commenter states that there is the potential for federally threatened VELB to exist in the project area. In addition, trimming or removing elderberry bushes is regulated by USFWS. The commenter goes on to state that USFWS should be contacted to discuss appropriate avoidance, minimization, and mitigation measures for impacts on VELB if work occurs within 100 feet of elderberry bushes.

Given DFG's comment, the City included an additional mitigation measure (Mitigation Measure MM BIO-3a in the September 2011 DEIR) for the protection of VELB. The mitigation measure requires consultation with USFWS in the event that construction activities occur within 100 feet of elderberry trees or bushes. Please see page 3B-16 in Chapter 3 for the revised mitigation measure language, which does not change the significance determinations in the September 2011 DEIR.

Response to Comment C-9

The commenter states that the project has the potential to affect burrowing owl and that avoidance measures are warranted if owls are found within the project footprint during the nesting season. If found, DFG recommends avoiding impacts by implementing a no-disturbance buffer (minimum distance of 250 feet unless changed by a qualified biologist for specifically allowed reasons). If the project requires burrowing owl to be evicted, then DFG recommends passive relocation during the non-breeding season. The commenter also recommends that foraging habitat be acquired to offset the loss of foraging and burrowing habitat and that artificial burrows replace occupied burrows where owls are evicted.

Page 3B-7 of the September 2011 DEIR discusses the existing setting for burrowing owl in the project area and states that no owls were observed during biological surveys for the project (see Appendix D of the September 2011 DEIR). Pages 3B-13 through 3B-15 of the September 2011 DEIR provide an analysis of impacts on special-status species and species of special concern, including burrowing owl. On page 3B-15, the September 2011 DEIR concludes that burrowing owl has the potential to occur within the project area; therefore, the project's temporary construction-related activities could adversely affect owls. Operational impacts would not occur because improvements to the plant would be made within the existing fence line, and the proposed recycled water conveyance system would be located underground. Also on page 3B-15, the September 2011 DEIR provides mitigation (Mitigation Measure MM BIO-2) to reduce impacts on burrowing owl to a level of less than significant. As described in the response to comment C-3, the City has revised Mitigation Measure MM BIO-2 to include recommendations from the current 2012 staff report on burrowing owl mitigation. Please see page 3B-15 in Chapter 3 for the revised mitigation measure language, which includes requiring the City to have a qualified biologist conduct a preconstruction survey to determine if owl burrows would occur in proximity of construction activities. If burrows are observed within the buffer, as described in the 2012 DFG staff report on burrowing owl, then avoidance measures consistent with those recommended in the staff report would be implemented, including avoidance during the breeding season and passive relocation during the non-breeding season. This revised mitigation would reduce construction-related impacts on burrowing owl to a level of less than significant. The September 2011 DEIR concluded that there would be no

operational impacts on owls as a result of the project beyond the baseline condition. Impacts on owls would be temporary, and habitat would not be lost as a result of the project. Therefore, acquisition of foraging habitat is not warranted.

Response to Comment C-10

The commenter states that other ground-nesting birds could exist in the project area. The commenter also states that if project-related activities occur during the breeding season, surveys for active nests should be conducted by a qualified biologist no more than 30 days prior to such activities and that a no-disturbance buffer (minimum of 250 feet) should be delineated around active nests until the breeding season has ended or birds have fledged or no longer require parental care.

Pages 3B-13 through 3B-15 of the September 2011 DEIR provide an analysis of impacts on special-status species and species of special concern, including common wildlife species and migratory birds (including other nesting birds). On page 3B-16, the September 2011 DEIR concludes that common wildlife species and migratory birds (including other nesting birds) have the potential to occur in the project area; therefore, the project's temporary construction-related activities could adversely affect such species. Operational impacts would not occur because improvements to the plant would be made within the existing fence line, and the proposed recycled water conveyance system would be located underground. Also on page 3B-16, the September 2011 DEIR provides mitigation (Mitigation Measure MM BIO-4) to reduce impacts on common wildlife species and migratory birds (including other nesting birds) to a level of less than significant. This mitigation includes requiring the City to have a qualified biologist conduct a preconstruction survey (within 30 days of the start of construction) to determine if any active nests are present in the project area. If evidence of an active nest is observed, then a no-disturbance buffer of 300 feet (500 feet for raptors) would be established by the qualified biologist until juveniles have fledged, the nest is vacant, and there is no evidence of subsequent attempts at nesting. This mitigation would reduce construction-related impacts on common wildlife species and migratory birds (including other nesting birds) to a level of less than significant. The September 2011 DEIR concluded that there would be no operational impacts on common wildlife species and migratory birds (including other nesting birds) as a result of the project beyond the baseline condition.

Comment Letter D

Mike N. Oliphant
Environmental Project Manager

Chevron Environmental Management Company
P.O. Box 6012
San Ramon, CA 94583
Tel (925) 790 6431
Fax (925) 790 6772
mike.oliphant@chevron.com

November 10, 2011

Stakeholder Correspondence–City of Visalia

Mr. James Ross
City of Visalia
7579 Avenue 288
Visalia, California 93277

Subject: **Comments on the City of Visalia Water Conservation Plant Upgrades Project – Draft Environmental Impact Report**
Chevron Environmental Management Company
Historical Pipeline Portfolio–Bakersfield to Richmond

Dear Mr. Ross:

On behalf of Chevron Environmental Management Company (CEMC), SAIC Energy, Environment & Infrastructure, LLC (SAIC; CEMC's contract consultant) recently reviewed the Draft Environmental Impact Report for the City of Visalia's Water Conservation Plant Upgrades Project (proposed project). It may help you in performing this work to understand something about Chevron's former pipeline in proximity to the planned project area, as residual weathered crude oil, abandoned pipeline, and asbestos-containing materials (ACM) could potentially be encountered during subsurface construction activities in this former pipeline right of way (ROW).

D-1

A portion of the former Tidewater Associated Oil Company (TAOC) pipeline was located within the proposed project area, along the west side of the Union Pacific Railroad ROW. This formerly active pipeline was constructed in the early 1900s and carried crude oil from the southern San Joaquin Valley to the San Francisco Bay Area. Pipeline operations for the TAOC ceased in the 1970s, at which point, the pipeline was taken out of commission. The degree and method of decommissioning varied; in some instances the pipeline was removed, while in others it remains in place. Because this pipeline has been decommissioned, with the majority of pipeline having been removed, it is not readily identified as an underground utility through the Underground Service Alert North System or utility surveys. Figure 1 illustrates the location of the former TAOC ROW with respect to the proposed project. The location of the pipeline shown on Figure 1 is based on historical as-built drawings and the approximated positional accuracy of the alignment is +/- 25 feet. The TAOC pipeline was installed at depths of up to 10 feet below ground surface. The steel pipeline was typically encased in a protective coating composed of coal tar and ACM.

Working under the direction of state regulatory agencies, CEMC conducted risk assessments at numerous locations with known historical crude-oil release points along the former TAOC pipeline. Analytical results from these risk assessments indicated that the crude-contaminated soil was non-hazardous. Accordingly, it is likely that if soil affected by the historical release of crude oil from this former pipeline

is encountered during construction activities, it may be reused as backfill on site. Properly abandoned crude-oil pipelines may be left in the ground. Parties conducting construction activities in the vicinity of this former pipeline ROW may wish to use the information provided in this letter to help prepare for the possibility of encountering the abandoned pipeline and pipeline-related ACM during the course of their work.

D-1 cont.

For more information regarding this historical pipeline, please visit http://www.hppinfo.com/. If you would like additional information, or would like to request more detailed maps, please contact SAIC consultants Tom Burns (thomas.a.burns@saic.com) at (916) 979-3748 or Daniel Anzelon (daniel.b.anzelon@saic.com) at (858) 826-3316.

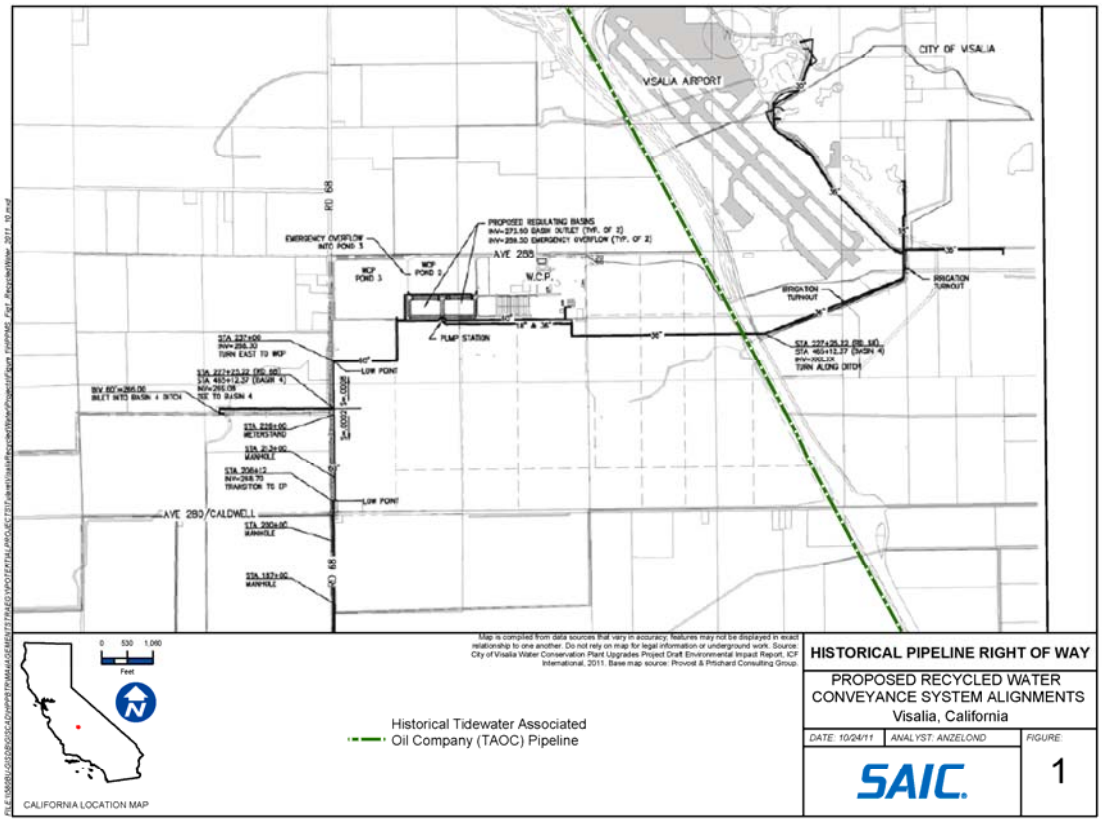
Sincerely,

Mike Oliphant

MO/klg

Enclosure:
Figure 1. Historical Pipeline Right of Way – Proposed Recycled Water Conveyance System Alignments

cc: Mr. Tom Burns – SAIC
3800 Watt Avenue, Suite 210, Sacramento, California 95821
Mr. Mike Hurd – SAIC (letter only)
1000 Broadway, Suite 675, Oakland, California 94607


CITY OF VISALIA
VISALIA AIRPORT
AVE 255
AVE 280/CALDWELL
PROPOSED REGULATING BASINS
EMERGENCY OVERFLOW INTO POND 1
W.C.P.
PUMP STATION
LOW POINT
IRRIGATION TURNOUT
CALIFORNIA LOCATION MAP
Historical Tidewater Associated Oil Company (TAOC) Pipeline
HISTORICAL PIPELINE RIGHT OF WAY
PROPOSED RECYCLED WATER CONVEYANCE SYSTEM ALIGNMENTS
Visalia, California
DATE: 10/24/11
ANALYST: ANZELOND
FIGURE:
1
SAIC.

D. Mike Oliphant, Environmental Project Manager, Chevron Environmental Management Company (November 10, 2011)

Response to Comment D-1

The City appreciates the Chevron Environmental Management Company's (Chevron's) time and effort in reviewing the September 2011 DEIR and providing comments about its content. The commenter states that Chevron reviewed the September 2011 DEIR and wanted to make the City aware of a right-of-way for an abandoned crude oil pipeline that lies in proximity to the project area. The commenter goes on to state that residual and weathered crude oil, abandoned pipe, and asbestos-containing materials (ACM) could be found in the pipeline right-of-way, which is located on the west side of the Union Pacific Railroad right-of-way. He notes that pipeline decommissioning in the 1970s varied; therefore, pipes could have been removed from the project area or abandoned in place. The commenter also provided a map that shows the pipeline right-of-way in relation to the proposed recycled water conveyance system alignments. The commenter disclosed that the pipeline was buried at depths of up to 10 feet below the ground surface and made of steel encased in a protective coating of coal tar and ACM. The commenter also states that, under the direction of state regulatory agencies, Chevron conducted risk assessments at numerous locations (i.e., known historical crude oil release points) along the pipeline right-of-way and determined that the crude-contaminated soil was nonhazardous; therefore, if encountered, the soil could be used for backfill. Finally, the commenter states that the information in the Chevron letter can be used to prepare for the possibility of encountering the pipeline and pipeline-related ACM during construction.

The Lead Agency thanks Chevron for taking the time to make the City aware of the possibility of unearthing an abandoned pipeline that contains ACM or disturbing crude-contaminated soil during the course of construction activities for the project. The City will include the pipeline right-of-way in its final design specifications and take appropriate steps in the event that the abandoned pipe, as well as ACM and/or crude-contaminated soil, is unearthed during construction. Appropriate steps include seeking direction and assistance from the Department of Toxic Substances Control and/or the Visalia Fire Department's Hazardous Materials Response Team in the event that construction disturbs potentially hazardous materials within the pipeline right-of-way.

Comment Letter E

TULARE IRRIGATION DISTRICT

6826 Avenue 240 • Tulare, California 93274 • Telephone (559) 686-3425

November 10, 2011

James Ross
City of Visalia
7579 Avenue 288
Visalia, California 93277

Subject: City of Visalia Water Conservation Plan Upgrades Project Draft Environmental Impact Report – Tulare Irrigation District Comments

Dear Mr. Ross:

E-1 The Tulare Irrigation District (District) appreciates the opportunity to review and comment on the City of Visalia Water Conservation Plan Upgrades Draft Environmental Impact Report (DEIR). Upon our review of the document the District found that we were not listed as a "Responsible Agency" under the DEIR. Given our potential involvement in the exchange of water from this project and as drawn out in our application for funding under the U.S. Bureau of Reclamation WaterSMART program we had envisioned that the District would be listed as a "Responsible Agency." The District would like to request that the City of Visalia include the District as a "Responsible Agency.

Again, the District greatly appreciates the opportunity to participate in the DIER process. If you have any further questions or comments, please feel free to contact me at 559-686-3425 or via email at akf@tulareid.org.

Sincerely,

Aaron Fukuda
District Engineer

E. Aaron Fukuda, District Engineer, Tulare Irrigation District (November 10, 2011)

Response to Comment E-1

The City appreciates the Tulare Irrigation District's (TID's) time and effort in reviewing the September 2011 DEIR and providing comments about its content. The commenter states that TID requests that it be listed as a Responsible Agency, per CEQA, for the project given the possible future water exchange between the City and TID as a result of this project.

The September 2011 DEIR disclosed on page 2-14 that the City was exploring the possibility of entering into water exchange agreements with TID and/or other entities to exchange recycled water generated by the water conservation plant for surface water. The September 2011 DEIR goes on to state, on page 2-15, that the City had not formally entered into any exchange agreements with TID and/or other entities at the time of the document's public review.

Subsequent to the public review period for the September 2011 DEIR, the City proposed entering into a water exchange agreement with TID. A summary outline of the proposed water exchange agreement can be found in Appendix B of the recirculated DEIR. In addition, the agreement is discussed in Chapter 2, *Project Description*, of the recirculated DEIR. Impacts resulting from the water exchange agreement were discussed throughout the recirculated DEIR.

Because the City and TID are now discussing the possibility of entering into a water exchange agreement, the City will honor TID's request to be listed as a Responsible Agency, per CEQA. The City considers TID a Responsible Agency for this project.

Comment Letter F

RESOURCE MANAGEMENT AGENCY

5961 South Mooney Blvd
Visalia, CA. 93277.
Phone (559) 624-7000
Fax (559) 730-2653

Michael C Spata — Planning
Britt L. Fussel — Public Works
Roger Hunt — Administration/Community Development

JAKE RAPER JR., AICP, DIRECTOR

November 10, 2011

James Ross
Public Works Manager
City of Visalia
707 West Acequia Avenue
Visalia, CA 93291

Re: Comments to Draft Environmental Impact Report
City of Visalia Water Conservation Plant Upgrades Project
State Clearinghouse No. 2010081057

Dear Mr. Ross:

After reviewing the proposed Draft Environmental Impact Report ("Draft EIR") for the City of Visalia Water Conservation Plant Upgrades Project, it is respectfully submitted that this environmental document is inadequate, incomplete and non-compliant with the information disclosure provisions required under the California Environmental Quality Act ("CEQA").

Thus, the proposed environmental document and water conservation plant project cannot be approved at this time pursuant to CEQA. The reasons supporting this position are delineated as follows:

F-1 **(1) There is inadequate and incomplete discussion of the discretionary permits and approvals required for this project (Chapter 1).** The Draft EIR indicates that the list of permits/approvals is not necessarily a comprehensive list of all discretionary permits/approvals required. This omission of information should be addressed.

F-2 **(2) There is inadequate and incomplete discussion of the project description affecting land within the unincorporated area of the county, particularly with respect to the right-of-way for Road 68 and the 60" diameter water pipeline (Chapter 2).** Specifically, the project description fails to describe the length of county roadway being affected and the location of trenching and construction activity that affects the road surface, road shoulder and road drainage area; and as such, impacts to the county's right-of-way are unclear. Moreover, the maps in the Draft EIR fail to illustrate adequately the location of the 60" diameter water pipeline within the county's right-of-way for Road 68. In fact, the maps do not show which side of the road the water pipeline is located and do not show the dimensions from asphalt improvements and road right-of- way line. Finally, construction of the 60" diameter

F-2 cont.

water pipeline within the county's right-of-way for Road 68 will impact the structural integrity of the roadway. For example, construction activities for installation of the 60" diameter water pipeline will result in trenching, digging and back-filling. This activity will substantially affect the physical character of the right-of-way. A discussion explaining the manner in which the roadway will be restored to an acceptable physical condition must be described and supported.

F-3

(3) There is inadequate and incomplete discussion of project-specific impacts relating to public services (Chapter 3; Appendix A). The Draft EIR dismisses from further evaluation the area of "public services." In doing so, the Draft EIR limits the scope of significant impacts to public services by focusing on services within the territorial limits of the city; and as such, public service impacts to the residents within the unincorporated area are not discussed. In fact, public service impacts have been identified in various reports prepared by the county. (See *Tulare County Public Facilities Impact Fee Study* (April 13, 2011) and *Traffic Impact Fee Study* (September 2010).) Based on these studies, as well as the discussion relating to Cumulative Baseline and Projected Growth in the Draft EIR, the foreseeable growth from the city will likely cause public facility and service impacts for which feasible mitigation in the nature of development impacts fees is necessary and feasible. Thus, the Draft EIR omits relevant discussion which needs to be addressed.

F-4

(4) There is inadequate and incomplete discussion of cumulative impacts that may potentially result from the proposed project (Chapter 4). Foundationally, the Draft EIR does not discuss the past, present and future project method or the summary of projections method to determine the extent of cumulative impacts. Hence, the discussion of cumulative impacts in this Draft EIR is fatally flawed. Additionally, in connection with public facility and service cumulative impacts, the city's attention is directed to recent reports prepared with respect to development impact fees. (See *County Public Facilities Impact Fee Study* (April 13, 2011) and *Traffic Impact Fee Study* (September 2010).) Based on these reports, the county is projected to suffer extraterritorial impacts from new development occurring within the cities, including the City of Visalia. Therefore, the Draft EIR omits discussion of these reasonably foreseeable public service impacts and potential mitigation through payment of development impact fees.

F-5

(5) There is inadequate and incomplete discussion of growth-inducing impacts (Chapter 6). The Draft EIR acknowledges that once the water exchange occurs, "the City will have a new source of urban water to accommodate anticipated growth." However, the Draft EIR does not acknowledge that this project will foster urban growth and allow development to proceed that otherwise would be precluded. Accordingly, the Draft EIR should explain and support how this project will accommodate growth and where the growth will occur.

F-6

(6) There is inadequate and incomplete discussion of significant irreversible changes (Chapter 7). The Draft EIR does not explain how an irreversible commitment of resources would be considered "acceptable as a matter of public policy." In fact, the Draft EIR does not specify the goals, policies and implementation measures of the City of Visalia General Plan that would be considered acceptable, nor does the Draft

F-6 cont.

EIR explain how the current general plan will ensure that any irreversible environmental changes associated with such commitments will be minimized.

Conclusion

F-7

Please consider the above comments as part of the public record developed for this Draft EIR and project. Accordingly, on the basis of this discussion, it is respectfully submitted that the proposed Draft EIR and water conservation plant project should not be approved at this time by the City of Visalia until the appropriate environmental analysis is conducted and re-circulated for public review.

Please provide to the undersigned a copy of the Final EIR (including Responses to Comments) or a copy of the Revised Draft EIR. In addition, please provide written notice of any public hearing or public meeting when this environmental document and project will be considered by the City of Visalia. Finally, we reserve the right to revise, extend and supplement this discussion. Thank you for your courtesy and consideration.

Sincerely,

Michael C. Spata
Assistant Director - Planning

cc: Tulare County Board of Supervisors
Tulare County Administrative Officer
Tulare County Resource Management Agency Director
Tulare County Counsel

3

F. Michael Spata, Assistant Planning Director, County of Tulare Resource Management Agency (November 10, 2011)

Response to Comment F-1

The City appreciates the Tulare County Resource Management Agency's time and effort in reviewing the September 2011 DEIR and providing comments about its content. The commenter states that the September 2011 DEIR provides an inadequate and incomplete discussion of the discretionary permits and approvals required for the project. The commenter goes on to state that the list of permits and approvals found in the September 2011 DEIR is not a comprehensive list and that this omission of information should be addressed.

The commenter indicates that the list of permits and approvals is incomplete but does not offer any specific details regarding what additional permits or approvals the County requires the City to provide. However, the City has revised the September 2011 DEIR to include language regarding approval of a road encroachment permit, which ensures the integrity of existing roadways, through the Tulare County Resource Management Agency's Transportation Branch; this was an unintentional omission in the September 2011 DEIR. As described in Chapter 3, *Errata and Clarifications to the Draft EIR*, approval of an encroachment permit is ministerial and does not require discretionary action by the Tulare County Planning Commission or the Tulare County Board of Supervisors unless appealed to the board. Please see pages ES-7, 2-16, and 3I-6 for revisions regarding the need to obtain a road encroachment permit for the project. Other than this omission, the City believes that the list is comprehensive and includes all required permits and approvals for development of the project. Additionally, State CEQA Guidelines Section 15151, regarding the standards for adequacy of an EIR, states that "the courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure." With inclusion of the revisions to the September 2011 DEIR, the City believes that the information disclosed in the document meets this benchmark regarding the standards for adequacy of an EIR. Additionally, the revisions do not change the significance determinations in the September 2011 DEIR.

Response to Comment F-2

The commenter states that the September 2011 DEIR is inadequate and incomplete and that it does not adequately describe impacts on unincorporated areas of the County, including the right-of-way for Avenue 68. The commenter states that the September 2011 DEIR does not discuss the length of the affected section of County roadway or the location of construction activities. The commenter goes on to state that the proposed water pipeline that would be constructed within the Avenue 68 right-of-way would affect the structural integrity of the roadway; therefore, the manner in which the roadway would be restored to an acceptable physical condition must be discussed.

As discussed in response to comment F-1, the City has revised the September 2011 DEIR to clarify that the City would be required to obtain a road encroachment permit from the County; this includes submittal and approval of a road encroachment permit application. The application requires any entity that affects a County road as a result of construction to provide two sets of engineering plans to the County for review and approval, provide proof of the required insurance, secure a bond for any accidental damage to the affected roadway during construction, and indemnify the County. To obtain an approved road encroachment permit, the City would have to provide the County with

information regarding the length of the County roadway being affected and the specific the location of construction activities, as requested by the commenter. In addition, because the permit application requires proof of insurance and a bond prior to approval, any accidental damage to County roadways caused by project construction would be mitigated.

The City disagrees with the commenter's assertion that the project would affect the structural integrity of the roadway. To obtain the necessary permit, the project would comply with standard engineering practices of both the City and County regarding construction near roadways, thereby ensuring that roadway integrity would not be compromised, and obtain approval from County engineers, who would verify that proposed construction within County rights-of-way would not permanently affect County roadways. The figures of the proposed recycled water conveyance system found in the September 2011 DEIR are preliminary and not to be used for construction. Preliminary engineering plans do not have the same level of detail as final plans. One reason a project develops preliminary plans is to avoid incurring undue engineering costs prior to approval. The provision of preliminary plans is standard during the draft EIR phase of a project. If the project is approved by the City Council, then "for construction" engineering plans with adequate detail would be developed and provided to the County for review and approval to obtaining a road encroachment permit.

Response to Comment F-3

The commenter states that there is an inadequate and incomplete discussion of project-specific impacts related to public services in the September 2011 DEIR. Specifically, the commenter states that the September 2011 DEIR does not discuss public services impacts on residents in unincorporated Tulare County. The commenter goes on to state that foreseeable growth in the City as a result of the project would most likely cause public services impacts in the County; therefore, mitigation in the form of development impact fees is necessary and feasible.

The City disagrees with the County's assertion that the project would result in foreseeable growth that would affect the City or County's ability to provide public services and, therefore, necessitate the need to pay public services impact fees to the County. As discussed on page 2-5 of the September 2011 DEIR, the existing plant has a permitted capacity of 20 million gallons per day (mgd) and a design capacity of 22 mgd. Page 2-9 notes that the project would construct membrane biological reactors (MBR); the number of MBR modules to be installed initially would handle 18 mgd. Therefore, the project would result in an initial decrease in capacity at the current plant but a significant increase in the quality of the plant's effluent. In addition, the project would not remove a barrier to growth by increasing the ultimate capacity of the existing plant; capacity would remain at 22.0 mgd. The project would treat influent to Title 22 standards. The treated water could be used for non-potable purposes (e.g., irrigation of feed and fodder crops or groundwater recharge) but could not be used for potable applications or human consumption. Therefore, the treatment of wastewater at the plant would not provide additional water for human consumption, and the project would not remove a barrier to growth. Finally, the proposed project would recharge an aquifer that is currently in a sustained overdraft condition. Therefore, the project would mitigate an existing overdraft condition but not increase the availability of water for additional entitlements beyond existing conditions.

For a project to affect public services, it needs to result in population growth or safety and security concerns that would require additional services, such as fire and police protection, schools, or parks. The project would not increase the capacity of the plant, provide potable water, or increase the

amount of groundwater available for entitlements. Therefore, the project would not be growth inducing. When completed, the project would occur within the existing secured fence line of the plant or be located underground (e.g., the recycled water conveyance system). The fence line is already adequately secured, and there is a low potential for malicious destruction or theft related to the underground pipeline infrastructure that would cause a need for additional public services beyond the level that is currently available. Therefore, the project would not result in additional safety and security concerns beyond the existing condition or require additional fire or police protection services.

As discussed on pages 3C-3 through 3C-5 of the recirculated DEIR, the City has determined that the proposed water exchange would not induce growth. Rather, it would help to alleviate the overdraft condition that currently exists in the Visalia area. As discussed in the Urban Water Management Plan (UWMP), continued pumping without development of new water sources and/or significant reductions in water use would contribute to the ongoing regional overdraft condition, which is unsustainable in a long-term, undefined future timeframe (beyond 2040). The proposed water exchange helps to make the long-term groundwater balance more sustainable. The City has determined that the proposed water exchange agreement would not remove a barrier to growth (i.e., provide additional potable water supplies) and, therefore, would not indirectly induce substantial population growth in the Visalia area.

In conclusion, because the project is not growth inducing and does not result in safety or security concerns greater than the baseline condition, the Draft EIR has provided an adequate analysis of impacts on public services resulting from the project.

Response to Comment F-4

The commenter states that the September 2011 DEIR is inadequate and incomplete and the cumulative impacts discussion is fatally flawed because it does not discuss the "past, present, and future projects method" or the "summary of projections method" in determining the extent of cumulative impacts. The commenter goes on to state that the County will suffer extraterritorial impacts from new development occurring within nearby cities and that the September 2011 DEIR does not discuss foreseeable public service impacts and potential mitigation through the payment of development impact fees.

The commenter is incorrect in saying that the September 2011 DEIR does not discuss the "past, present, and future projects method" or the "summary of projections method" in determining the extent of cumulative impacts. On page 4-2 of the September 2011 DEIR, the projection approach, or "summary of projections method," is described. Specifically, the September 2011 DEIR provides the following:

> **Cumulative Impact Assessment Methodology**
>
> The significance of a cumulative impact, as well as a project's incremental contribution to a cumulative impact, can be analyzed by using either the project list or projection approach. This EIR uses the projection approach to analyze cumulative impacts, per CCR, Title 14, Division 6, Chapter 3, Section 15130(b)(1)(B). The cumulative impact analysis is based on growth and housing projections for the City. In using this approach, the City relies on growth and housing projections to evaluate regional conditions that contribute to cumulative impacts.

According to the State CEQA Guidelines, the cumulative analysis should provide the following:

> …define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used [CCR, Title 14, Division 6, Chapter 3, Section 15130(b)(3)].
>
> A summary of expected environmental effects to be produced by [related] projects with specific reference to additional information and where that information is available [CCR, Title 14, Division 6, Chapter 3, Section 15130(b)(4)].
>
> A reasonable analysis of cumulative impacts of the relevant projects. An EIR shall examine reasonable and feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects [CCR, Title 14, Division 6, Chapter 3, Section 15130(b)(5)].

This chapter provides these required components for the projection approach to the cumulative impacts analysis.

Cumulative Baseline and Projected Growth

Unless otherwise stated in the following cumulative impact analysis, the geographic area for this analysis shall be the City and adjacent unincorporated areas outside the City, such as the city of Goshen. According to the *Visalia General Plan Update, Existing Conditions Report* (Dyett & Bhatia 2010), the Visalia area is expected to experience an annual population growth rate of 1.9% and an annual household growth rate of 2.0% between 2010 and 2030. Table 4-1 shows the area's population and household growth projections through 2030 in 5-year increments.

Table 4-1. City of Visalia Area Population and Household Projections (2010–2030)

						2010–2030 Growth		
Item	2010	2015	2020	2025	2030	Total	Percent	Annual Percent
Population	142,079	155,119	174,259	190,900	207,582	65,503	46%	1.9%
Households	50,261	55,111	62,506	68,662	74,855	24,594	49%	2.0%

Note:
Includes adjacent unincorporated areas outside the City (such as Goshen).
Source: Dyett & Bhatia 2010.

The table shows that the Visalia area is growing rapidly, and population and household numbers will increase by 65,503 and 24,594, respectively, between 2010 and 2030. Although the Visalia area is currently experiencing the same economic downturn as the rest of the nation, it is clear from the projections that the Visalia area will most likely experience robust growth through 2030.

The September 2011 DEIR does discuss the "summary of projections method." In addition, the City disagrees with the commenter's assertion that the September 2011 DEIR does not discuss foreseeable public service impacts as well as comments regarding extraterritorial impacts from new development occurring in nearby cities in the County and potential mitigation through the payment of development impact fees. Please see the response to comment F-3 for more information.

Response to Comment F-5

The commenter states that the September 2011 DEIR presents an inadequate and incomplete discussion about growth-inducing impacts. Specifically, the commenter states that the September 2011 DEIR acknowledges a new source of urban water in the City to accommodate anticipated growth, but the document does not acknowledge the project's role in fostering growth and development that would otherwise be precluded. The commenter states that the September 2011 DEIR should provide information regarding how this project would accommodate growth and discuss where growth would occur.

Although the September 2011 DEIR does say, on page 6-2, that "the City will have a new source of urban water to accommodate anticipated growth," the quoted statement is part of a larger discussion that points out, in the next sentence on the same page, that the City has not yet entered into formal agreements to exchange water, and therefore, the analysis of growth-inducing impacts is premature and speculative. Specifically, following the quoted text, the September 2011 DEIR goes on to state that:

> [T]he City will have a new source of urban water to accommodate anticipated growth, and the exchange partners will be able to reverse overdraft conditions in the basin by offsetting groundwater use with recycled water. However, at the time of this EIR's public review, the City has not formally entered into any exchange agreements with TID and/or other entities. Therefore, it is premature and speculative to analyze the environmental impacts of such exchanges. Future water exchanges between the City and TID and/or other entities would have to undergo separate environmental review in compliance with CEQA and, if necessary, NEPA. This future review would be required to discuss the growth-inducement ramifications of exchanging recycled water for surface water (e.g., surface water for urban uses and the resultant population growth). In compliance with the CEQA, future environmental review could tier off of this EIR. This EIR's analysis is limited to the environmental impacts of discontinuing discharges of treated effluent into Mill Creek and instead conveying the recycled water into the recycled water conveyance system for irrigation and groundwater recharge purposes only.

Because the proposed project would convey recycled water for irrigation and groundwater recharge and the recycled water would not be intended for urban uses (i.e., potable uses) at this time, the project would not be considered indirectly growth inducing.

The analysis presented in Chapter 6, *Growth-Inducing Impacts*, of the recirculated DEIR replaces the growth-inducing analysis in the September 2011 DEIR. The growth-inducing analysis in the recirculated DEIR includes information regarding consideration of a possible water exchange agreement between the City and TID. The analysis in the recirculated DEIR concludes by saying that the proposed project would not directly induce growth because it would not require additional employees or result in the need for new homes or businesses. In addition, it would not change the capacity of the treatment plant. Therefore, it would not directly induce growth by allowing more sewage to be treated (i.e., removing a barrier to growth).

The analysis in the recirculated DEIR also states that the proposed project would not indirectly induce growth. Currently, the water conservation plant's treated effluent is either discharged into Mill Creek and used by the Kaweah Delta Water Conservation District and farmers with property adjacent to the creek who have agricultural needs or used for incidental groundwater recharge. It is not treated to a standard that would make it suitable for urban use. Under the proposed project, discharges of treated effluent into Mill Creek would cease. Instead, treated effluent would be conveyed to the recycled water conveyance system and used for irrigation at Plaza Park and Valley Oaks Golf Course as well as on 250 acres of farmland south of the plant. It would also be delivered to TID for agricultural irrigation purposes under a water exchange agreement. Currently, the regional

groundwater basin is in a sustained overdraft condition because of groundwater pumping to meet urban and agricultural demands in the area. Under this project, the exchange of recycled water for Central Valley Project (CVP) water, which would be used for groundwater recharge, would help mitigate the overdraft condition. It is important to point out that approximately 95% of pumping from the aquifer is for agricultural and other uses. Even if the City is brought into balance with respect to aquifer replenishment and groundwater extraction, the aquifer would remain in a significant state of overdraft, and the water table would continue to decline.

The water exchange agreement that has been proposed as part of the project would enable the plant to exchange between 11,000 and 17,600 acre-feet per year, on average, of recycled water for 5,500 to 8,800 acre-feet per year, on average, of surface water, which would be provided by TID to the City over a 20-year period.

As discussed in Section 3C, *Population and Housing*, of the recirculated DEIR, surface water received by the City would be conveyed to facilities to the east to recharge the aquifer beneath the City. The City proposes conveying surface water to the eastside because groundwater flow travels from east to west, and the City wants to retain as much of the recharged water as possible. It is assumed that some of the surface water for groundwater recharge would eventually be pumped back up, treated, and then used as potable water for the benefit of the City and its residents. Therefore, the primary function of the proposed water exchange would be to help alleviate the groundwater overdraft condition that currently exists in the Visalia area.

The UWMP acknowledges that the ultimate reliability of the water supply for the Visalia District, which includes the City, is a function of the long-term balance between aquifer replenishment and groundwater extraction. The UWMP also mentions the possibility of the water conservation plant providing recycled water, which would increase recharge in the Visalia area, thus improving the local water balance. The UWMP goes on to say that a reduction and/or augmentation in pumping of about 11,000 acre-feet per year would be needed to bring the Visalia area's groundwater levels back into balance for the long term. It is important to point out that this estimate is based on assumptions with inherently large uncertainties because of certain unknowns (e.g., groundwater losses due to migration within the aquifer). Additionally, this estimate was only for the purpose of estimating the amount of overdraft attributable to municipal pumping. Approximately 95% of pumping from the aquifer is for agricultural and other uses. Even if the City is brought into balance, the aquifer would remain in a significant state of overdraft, and the water table would continue to decline.

The proposed water exchange agreement would provide an average of between 5,500 and 8,800 acre-feet of surface water per year for groundwater recharge. The UWMP points to recycled water use as well as other management activities, such as increased conservation, augmented artificial recharge, other exchanges and transfers, and surface water acquisition, to reach the 11,000-acre-feet-per-year reduction and/or augmentation necessary to achieve groundwater balance. But, as discussed above, this estimate is based on assumptions with inherently large uncertainties because of certain unknowns (e.g., groundwater losses due to migration within the aquifer).

The City has determined that the proposed water exchange would not induce growth. Rather, it would help to alleviate the overdraft condition that currently exists in the Visalia area. As discussed in the UWMP, continued pumping without development of new water sources and/or significant reductions in water use would contribute to the ongoing regional overdraft condition, which is unsustainable in a long-term, undefined future timeframe (beyond 2040). The proposed water exchange would help to make the long-term groundwater balance more sustainable.

Response to Comment F-6

The commenter states that the September 2011 DEIR is inadequate and incomplete because it does not explain how an irreversible commitment of resources could be considered "acceptable as a matter of public policy." The commenter goes on to state that the September 2011 DEIR does not specify the goals, policies, and implementation measures of the City of Visalia General Plan that would be considered acceptable, nor does the September 2011 DEIR explain how the current general plan would ensure that irreversible environmental changes associated with commitments of resources would be minimized.

The City of Visalia General Plan, like all general plans, is the policy regarding acceptable land uses within a jurisdiction—in this case, the City of Visalia. Generally, the general plan guides growth and land development within a jurisdiction for both the short and long term. The water conservation plant is already an acceptable land use under the current general plan land use designation and, therefore, has been accounted for in the current general plan. The proposed recycled water conveyance system is also an allowable use because underground infrastructure is allowed by right within existing right-of-way easements after obtaining a road encroachment permit. It does not change the land use designations within the general plan area. Compliance with the general plan means that the project has already been accounted for as part of the land development within the City. The programmatic EIR for the general plan has already accounted for significant irreversible changes to the environment from all projects, including this project, provided that the projects are in compliance with the general plan. Although project construction would require the use of nonrenewable resources, such as metals, oils, fuel, etc., the commitment of these resources for the project would not be on a scale that would deplete them to a point where they would not be available in the future.

Response to Comment F-7

The commenter concludes by saying that, given the County's previous comments, the September 2011 DEIR should not be approved until an appropriate analysis is conducted and the revised document is recirculated for public review. The commenter also states that the County requests a copy of the Final EIR or a copy of the revised Draft EIR. In addition, the County requests written notice of any public hearing or public meeting during which the final document and project will be considered by the City. The commenter goes on to state that the County reserves the right to revise, extend, and supplement the discussion.

Please refer to response to comment F-1 through response to comment F-6. As discussed therein, the September 2011 DEIR and recirculated DEIR (collectively, the Draft EIR) are adequate for purposes of CEQA and satisfy State CEQA Guidelines Section 15151 regarding the standards for adequacy of an EIR. As discussed above, the project would not be growth inducing and would not affect County public services. The Draft EIR provides appropriate analyses regarding alternatives to the project and irreversible commitments of resources as a result of the project. As a commenter to this Draft EIR, the County will receive a copy of the Final EIR and written notices of any public hearings or public meetings regarding the project. It is the County's right to revise, extend, and supplement the discussion, provided it does so within the timeframes mandated by CEQA and City regulation.

Comment Letter G

State Water Resources Control Board

NOV 1 0 2011

Mr. James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Dear Mr. Ross:

DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR THE CITY OF VISALIA (CITY); CITY OF VISALIA WATER CONSERVATION PLANT UPGRADES PROJECT (PROJECT); TULARE COUNTY; STATE CLEARINGHOUSE NO. 2010081057

We understand the City is pursuing Clean Water State Revolving Fund (CWSRF) financing for this Project (CWSRF No. C-06-7215-110). As a funding agency and a State agency with jurisdiction by law to preserve, enhance, and restore the quality of California's water resources, the State Water Resources Control Board (State Water Board) is providing the following information and comments for the environmental document prepared for the Project.

G-1 Please provide us with the following documents applicable to the proposed Project: (1) two copies of the draft and final EIR, (2) the resolution certifying the EIR making California Environmental Quality Act (CEQA) findings, (3) all comments received during the review period and the City's response to those comments, (4) the adopted Mitigation Monitoring and Reporting Program, and (5) the Notice of Determination filed with the Governor's Office of Planning and Research, State Clearinghouse. In addition, we would appreciate notices of any hearings or meetings held regarding environmental review of any projects to be funded by the State Water Board.

G-2 The State Water Board, Division of Financial Assistance, is responsible for administering CWSRF projects. The primary purpose for the CWSRF Program is to implement the Clean Water Act and various state laws by providing financial assistance for wastewater treatment facilities necessary to prevent water pollution, recycle water, correct nonpoint source and storm drainage pollution problems, and provide for estuary enhancement, and thereby protect and promote health, safety and welfare of the inhabitants of the state. The CWSRF Program provides low-interest funding equal to one-half the most recent State General Obligation Bond Rates with a 20-year term. Applications are accepted and processed continuously. Please refer to the State Water Board's CWSRF website at www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/index.shtml.

G-2 cont.

The CWSRF Program is partially funded by the U.S. Environmental Protection Agency and requires additional "CEQA-Plus" environmental documentation and review. Four enclosures are included that further explain the environmental review process and some additional federal requirements in the CWSRF Program. The State Water Board is required to consult directly with agencies responsible for implementing federal environmental laws and regulations. Any environmental issues raised by federal agencies or their representatives will need to be resolved prior to State Water Board approval of a CWSRF financing commitment for the proposed Project. For further information on the CWSRF Program, please contact Mr. Ahmad Kashkoli at (916) 341-5855.

G-3

It is important to note that prior to a CWSRF financing commitment, projects are subject to provisions of the Federal Endangered Species Act, and must obtain Section 7 clearance from the U.S. Fish and Wildlife Service (USFWS), and/or National Marine Fisheries Service (NMFS) for any potential effects to special status species. Please be advised that the State Water Board will consult with the USFWS, and/or the NMFS regarding all federal special status species the Project has the potential to impact.

The City will need to identify whether the Project will involve any direct effects from construction activities or indirect effects, such as growth inducement, that may affect federally listed threatened, endangered, or candidate species that are known, or have a potential to occur on-site, in the surrounding areas, or in the service area, and to identify applicable conservation measures to reduce such effects.

G-4

In addition, CWSRF projects must comply with federal laws pertaining to cultural resources, specifically Section 106 of the National Historic Preservation Act. The State Water Board has responsibility for ensuring compliance with Section 106 and the State Water Board's Cultural Resources Officer (CRO) must consult directly with the California State Historic Preservation Officer (SHPO). SHPO consultation is initiated when sufficient information is provided by the CWSRF applicant. Please contact the CRO, Ms. Cookie Hirn, at (916) 341-5690, to find out more about the requirements, and to initiate the Section 106 process if the City decides to pursue CWSRF financing. Note that the City will need to identify the Area of potential Effects (APE), including construction and staging areas and the depth of any excavation. The APE is three-dimensional and includes all areas that may be affected by the Project. The APE includes the surface area and extends below ground to the depth of any Project excavations. The records search request should be made for an area larger than the APE. The appropriate area varies for different projects but should be drawn large enough to provide information on what types of sites may exist in the vicinity.

G-5

Other federal requirements pertinent to the Project under the CWSRF Program include the following:

A. Compliance with the federal Clean Air Act: (a) Provide air quality studies that may have been done for the Project; and (b) if the Project is in a nonattainment area or attainment area subject to a maintenance plan; (i) provide a summary of the estimated emissions (in tons per year) that are expected from both the construction and operation of the Project for each federal criteria pollutant in a nonattainment or maintenance area, and indicate if the nonattainment designation is moderate, serious, or severe (if applicable);

G-5 cont.

(ii) if emissions are above the federal de minimis levels, but the Project is sized to meet only the needs of current population projections that are used in the approved State Implementation Plan for air quality, quantitatively indicate how the proposed capacity increase was calculated using population projections.

G-6

B. Protection of Wetlands: Identify any portion of the proposed Project area that may contain areas that should be evaluated for wetlands or U.S. waters delineation by the U.S. Army Corps of Engineers (USACE), or require a permit from the USACE, and identify the status of coordination with the USACE.

G-7

C. Compliance with the Farmland Protection Policy Act: Identify whether the Project will result in the conversion of farmland. State the status of farmland (Prime, Unique, or Local Statewide Importance) in the Project area and determine if this area is under a Williamson Act Contract.

G-8

D. Compliance with the Migratory Bird Treaty Act: List any birds protected under this act that may be impacted by the Project and identify conservation measures to minimize impacts.

G-9

E. Compliance with the Flood Plain Management Act: Identify whether or not the Project is in a Flood Management Zone and provide a copy of the Federal Emergency Management Agency flood zone map(s) for the area.

G-10

F. Compliance with the Wild and Scenic Rivers Act: Identify whether or not any Wild and Scenic Rivers would be potentially impacted by the Project and include conservation measures to minimize such impacts.

Following are specific comments on the City's DEIR:

G-11

1. Section 3F Hydrology and Water Quality states that the Project involves upgrading the City's existing water conservation plant to produce recycled water suitable for reuse and develop a recycled water conveyance system for possible water exchanges in the future. The City determined in the DEIR that the Project will result in a decrease of effluent discharges to Mill Creek.

Please discuss the Project's direct and indirect effects to the biological resources (including any special-status species) and their habitat. Also, discuss the water quality impacts to the creek as a result of the decreased discharge. Provide substantial evidence and surveys to support your findings.

G-12

2. Section 3F-12 states that the Project will result in unavoidable significant groundwater impacts by substantially depleting groundwater supplies or interfering substantially with groundwater recharge, resulting in a new deficit in aquifer volume or a lowering of the local groundwater table.

The Lead Agency must not approve a project if a project will have a significant effect on the environment after imposition of feasible mitigation or alternatives, unless the Lead Agencies find, that the benefits of a proposed project outweigh the unavoidable adverse environmental effects. Per CEQA Guidelines, Section 15093, the City will need to adopt Statements of Overriding Consideration to substantiate its decision to approve the Project despite the unavoidable significant groundwater impacts.

Mr. James Ross - 4 -

G-13 Thank you for the opportunity to review the City's DEIR. We have no further comments at this time. If you have any questions or concerns, please feel free to contact me at (916) 327-9401, or by email at ldlee@waterboards.ca.gov, or contact Ms. Shuka Rastegarpour at (916) 341-7388, or by email at srastegarpour@waterboards.ca.gov.

Sincerely,

Ahmad Kashkoli

for Lisa Lee
Environmental Scientist

cc: State Clearinghouse
(Re: SCH# 2010081057)
P.O. Box 3044
Sacramento, CA 95812-3044

Enclosures (4)

1. SRF & CEQA Requirements
2. Quick Reference Guide to CEQA Requirements for State Revolving Fund Loans
3. Instructions and Guidance for "Environmental Compliance Information"
4. Basic Criteria for Cultural Resources Reports

bcc: Ahmad Kashkoli, Division of Financial Assistance
Madeleine Hirn, Division of Financial Assistance
Shuka Rastegarpour, Division of Financial Assistance
Pete Mizera, Division of Financial Assistance

S:\Funding Programs\Environmental Review Unit\SCH letters\2011\CityOfVisalia

G. Lisa Lee, Environmental Scientist, State Water Resources Control Board (November 10, 2011)

Response to Comment G-1

The City appreciates the SWRCB's time and effort in reviewing the September 2011 DEIR and providing comments about its content. The commenter acknowledges that the City is pursuing funding through the Clean Water State Revolving Fund (CWSRF) to preserve, enhance, and restore the quality of California's water resources. The commenter goes on to state that the SWRCB requests two copies of the Draft and Final EIR; the resolution certifying the EIR, with findings; the adopted Mitigation Monitoring and Reporting Program; the Notice of Determination filed with the State Clearinghouse; and notices of any hearings or meetings held regarding environmental review for the project.

The City will provide the SWRCB with all notices of hearings or meetings held regarding environmental review for the project at least 10 days prior to any such hearings or meetings. If the City Council makes a determination to approve the project, the City will provide the SWRCB with all requested documentation as part of the financial application package submitted to the SWRCB for CWSRF financing.

Response to Comment G-2

The commenter states that the SWRCB's Division of Financial Assistance is responsible for administering projects that pursue funding through the CWSRF, the primary purpose of which is to implement the Clean Water Act and various state laws by providing financial assistance for wastewater treatment facilities to prevent water pollution and recycle water. The commenter also states that the CWSRF program provides low-interest funding with a 20-year term as well as a website where applications are accepted and processed. The commenter goes on to state that the CWSRF program, which is partially funded by the U.S. Environmental Protection Agency, requires additional "CEQA-Plus" environmental documentation; the SWRCB will need to consult directly with the agencies that are responsible for implementing federal environmental laws and regulations. The commenter concludes by saying that any environmental issues raised by federal agencies will need to be resolved prior to the SWRCB's approval of financing.

The City acknowledges that the SWRCB's Division of Financial Assistance is responsible for administering CWSRF projects and is appreciative of board's financial assistance for the enhancement of wastewater treatment facilities, such as the City's water conservation plant. The City is aware of the additional "CEQA-Plus" environmental documentation required to qualify for such financing, and the September 2011 DEIR includes a discussion of "CEQA-Plus" environmental documentation requirements on page 1-2. The discussion acknowledges the need to comply with the federal Endangered Species Act (ESA), the National Historic Preservation Act (NHPA), and the General Conformity Rule for the federal Clean Air Act. Sections 3A, *Air Quality*; 3B, *Biological Resources*; and 3C, *Cultural Resources*, of the September 2011 DEIR provide additional information about the specific "CEQA-Plus" requirements that need to be met to satisfy these federal laws. The responses below provide additional information about the September 2011 DEIR's compliance with the "CEQA-Plus" requirements. A copy of a brochure produced by the SWRCB that outlines "CEQA-Plus" environmental documentation requirements for CWSRF applicants is attached to this Final EIR (Attachment 2). The guidance in this brochure provided the basis for the "CEQA-Plus" analysis in the September 2011 DEIR.

Response to Comment G-3

The commenter states that projects are subject to the provisions of the ESA and that Section 7 clearance from USFWS and/or the National Marine Fisheries Service (NMFS) must be obtained for any potential effects on special-status species prior to a CWSRF financing commitment. The commenter also states that the SWRCB must consult with USFWS and/or NMFS about the project. The commenter states that the City will need to determine whether the project involves any direct or indirect impacts that may affect federally listed species on-site or in the surrounding area and provide mitigation to reduce such impacts.

The City acknowledges that the project is subject to the provisions of the ESA and that it is responsible for obtaining Section 7 clearance. Furthermore, it recognizes that the SWRCB must consult with USFWS about the project. Because the project would be located within the Central Valley of California and would not affect fisheries, consultation with NMFS would most likely not be required for this project. The September 2011 DEIR provides adequate analysis regarding the project's impacts, which were determined to be less than significant with mitigation, on special-status species for the SWRCB to obtain Section 7 clearance from USFWS during consultation. Specifically, pages 3B-13 through 3B-16 of the September 2011 DEIR provide an analysis of the impacts and discuss the mitigation measures that would be implemented to ensure that the project would not significantly affect special-status species. The analysis concludes by saying that, with mitigation, temporary construction-related impacts on special-status species would be less than significant. In addition, the operational impacts of the project on special-status species would be the same as those encountered under the baseline condition at the existing plant. Construction-related mitigation to reduce potential impacts on special-status species to a level of less than significant would require San Joaquin kit fox, burrowing owl, Swainson's hawk, and special-status and common bird avoidance measures to be implemented.

Response to Comment G-4

The commenter states that the project must comply with Section 106 of the NHPA and that the SWRCB has responsibility for ensuring compliance, including consulting with the State Historic Preservation Officer (SHPO) once adequate analysis is provided to the SWRCB's Cultural Resources Officer (CRO). The commenter goes on to state that the City will be required to provide an area of potential effects (APE) map as part of the information package provided to the CRO prior to consultation with the SHPO.

The City acknowledges that the project is subject to Section 106 of the NHPA and that the SWRCB's CRO must consult with the SHPO about the project. The September 2011 DEIR provides adequate analysis about the project's impacts on historic resources for the CRO to consult with the SHPO. (The analysis concluded that there would be no impacts.) Page 3C-9 of the September 2011 DEIR includes an analysis of the project's impacts on cultural resources. The analysis concludes by saying that the project would not affect any structures that are more than 50 years old and eligible for consideration by the National Register of Historic Places or the California Register of Historical Resources. Therefore, the SHPO will most likely not require an APE map to be produced for the project because there would be no effects on historic resources. Nonetheless, if the CRO asks the City to prepare an APE map for the project, the City will comply with such a request and provide it as part of the financial application package.

Response to Comment G-5

The commenter states that the project is required to comply with federal requirements in addition to those previously mentioned, such as the Clean Air Act. This includes providing air quality studies prepared for the project as well as a summary of the estimated emissions expected during both construction and operation of the project for each federal criteria pollutant, with designation indicated, if applicable. The commenter also states that if emissions are above de minimis levels but the project is appropriately sized to meet current population needs, then the Lead Agency must quantitatively indicate how the facility's capacity was calculated.

The City acknowledges that the project is subject to the Clean Air Act and General Conformity Rule. The Draft EIR provides an adequate analysis of the project's impacts on air quality. Specifically, Section 3A, *Air Quality*, of the September 2011 DEIR provides an analysis of air quality impacts that would result from implementation of the project, including a summary of modeled air emissions outputs. These outputs were modeled by using URBEMIS air quality modeling software. Pages 3A-17 and 3A-18 of the September 2011 DEIR provide a summary of unmitigated and mitigated construction-period emissions, in tons per year, and pages 3A-21 and 3A-22 of the document provide operational area-source and net aggregate emissions, in tons per year. On pages 3A-22 and 3A-23, the September 2011 DEIR concludes that, with mitigation, the project would not exceed the de minimis thresholds of the U.S. Environmental Protection Agency's General Conformity Rule. Mitigation for the project requires diesel oxidation catalysts for off-road construction equipment and the preparation of a dust control plan. The San Joaquin Air Pollution Control District (SJVAPCD) has commented on the project and determined that, with mitigation, it would not be subject to Rule 9510 (Indirect Source Review) or require submittal of an Air Impact Assessment application (see response to comment I-1). Also, as discussed in response to comment F-3 through response to comment F-5, above, the project would not be growth inducing, nor would it increase the existing capacity of the plant. Therefore, it is not necessary to indicate quantitatively how a projected capacity increase was calculated.

Response to Comment G-6

The commenter requests that the City identify any portion of the project area that should be evaluated for wetlands or waters of the United States or permitted through the U.S. Army Corps of Engineers (USACE).

The September 2011 DEIR identifies two crossings along Mill Creek, a water of the United States, on page 3B-17. If the City's Engineering Division determines that the crossings cannot be avoided, the September 2011 DEIR concludes that a permit from USACE will be required. USACE Nationwide Permit No. 12 (utility line crossings) could be used to comply with USACE permit requirements. The mitigation on page 3B-17 of the September 2011 DEIR (Mitigation Measure MM BIO-5) requires the City to obtain a permit from USACE and mitigate all temporary impacts by returning the crossings to pre-project function and conditions prior to the issuance of grading or building permits. Currently, the City has not coordinated with USACE, other than to offer an opportunity to comment on the September 2011 DEIR. To date, no comments from USACE have been received. If needed, the City will coordinate with USACE and obtain a permit for the crossings, a copy of which will be provided to the SWRCB as part of the financial application package.

Response to Comment G-7

The commenter states that compliance with the Farmland Protection Policy Act is required and asks if the project would result in the conversion of farmland. The commenter also requests that the City provide information regarding the status of farmland in the project area and determine if the project area is under a Williamson Act contract.

As discussed in the NOP/IS (see Appendix A of the September 2011 DEIR), improvements at the plant would not affect farmland because they would occur within the existing fence line. Therefore, crop production is already precluded. The proposed recycled water conveyance system, which would be placed underground, would be within areas that are considered Prime Farmland, and some surrounding areas may be under Williamson Act contracts. However, once placed in the ground, the pipes for the recycled water conveyance system would not preclude future farming activities on the surface. Therefore, the project is in compliance with the Farmland Protection Policy Act.

Response to Comment G-8

The commenter states that compliance with the Migratory Bird Treaty Act (MBTA) is required and asks the City to list any birds that are protected under the MBTA and may be affected by the project and identify conservation measures to minimize impacts.

As discussed in Section 3B, *Biological Resources*, of the September 2011 DEIR, the project may affect birds that are protected by the MBTA, including burrowing owl and Swainson's hawk. A list of the birds that were observed within the project area during the biological survey for the project and may be protected by the MBTA can be found in Table 3B-2 on page 3B-4 of the September 2011 DEIR. Page 3B-16 of the September 2011 DEIR states that construction activities could result in the direct loss of active nests of common bird species or the abandonment of active nests by adult birds and notes that the MBTA protects the active nests of all native bird species. On the same page is a mitigation measure (Mitigation Measure MM BIO-4) that requires the City to conduct pre-disturbance nesting bird surveys using a qualified biologist to determine if nesting birds are present within areas that could be affected by project-related disturbances. If nests are found, then disturbances would not be allowed within 300 feet of active nests (500 feet for raptors), or a distance deemed adequate by the qualified biologist, until juveniles have fledged, the nest is vacant, and there is no evidence of a subsequent attempt at nesting. After the limits of construction are established, the qualified biologist will serve as a monitor until the above conditions have been met. This mitigation ensures that birds that are protected by the MBTA are not be harassed and that the project complies with the MBTA.

Response to Comment G-9

The commenter states that the project would have to comply with the Flood Plain Management Act and requests that the City determine if the project is within a Flood Management Zone and provide a copy of the Federal Emergency Management Agency (FEMA) flood zone maps for the project area.

As discussed on page 3F-18 of the September 2011 DEIR, the plant footprint and the proposed recycled water conveyance system are found entirely within areas that have been mapped by FEMA as Flood Zone A, which is within the 100-year flood zone (i.e., annual flood risk of 1%). Construction of the project would have to comply with the City's Stormwater Management Program as well as the City's Engineering Division standards and Design and Improvement Standards for Drainage

Structures. These drainage standards apply to storm drain manholes, drainage inlets, and outfalls. As discussed in the September 2011 DEIR, Mitigation Measure MM HYD-2 would require a drainage plan, which would need to be reviewed and approved by the City's Engineering Division. The plan would identify post-construction treatment, control, and design measures to minimize runoff and surface pollution. The City will provide applicable FEMA maps to the SWRCB as part of the financial aid package.

Response to Comment G-10

The commenter states that compliance with the Wild and Scenic Rivers Act is required and asks if any Wild and Scenic Rivers would be affected by the project.

The project would not affect any Wild and Scenic Rivers. The only water of the United States that would be affected by the project is a section of Mill Creek downstream of the current effluent discharge point; the creek is not classified as a Wild and Scenic River. The closest Wild and Scenic Rivers are 1) the north fork of the Kern River, from the Tulare-Kern county line to its headwaters in Sequoia National Park, and 2) the entire middle and south forks of the Kings River as well as 6 miles of the Kings River where it flows through Kings Canyon and Sequoia National Park and the Sierra National Forest. Therefore, measures to minimize impacts on Wild and Scenic Rivers are not required.

Response to Comment G-11

The commenter states that the project involves upgrading the plant to provide recycled water, which would decrease effluent discharges to Mill Creek. The commenter asks if the project would have direct or indirect effects on biological resources or affect water quality as a result of decreased discharges of effluent into Mill Creek.

In response to the comment, Section 3B, *Biological Resources*, of the recirculated DEIR was prepared. The section analyzes downstream effects on riparian habitat and wildlife, including special-status species, resulting from the cessation of discharges into Mill Creek. The following discussion summarizes that analysis.

Twelve special-status plant species are known to occur in the project area (see Appendix C of the recirculated DEIR); however, of the 12, only one special-status plant species (California satintail) is associated with riparian habitat. The survey of the riparian area nearest to the effluent discharge point determined that the cessation of discharges into Mill Creek would not affect a special-status plant species because California satintail does not occur in the survey area.

Two special-status wildlife species have the potential to occur in the survey area, California tiger salamander and western spadefoot. Given the disturbed agricultural nature of areas adjacent to the survey area, it is unlikely that suitable vernal pools would be available for California tiger salamanders. Also, the survey area is outside the known range for California tiger salamander. Therefore, the cessation of discharges into Mill Creek would have no impact on salamanders. In addition, the survey area is outside the known range for western spadefoot. Therefore, the cessation of discharges into Mill Creek would have no impact on western spadefoot.

The plant communities along Mill Creek provide limited foraging and breeding habitat for small mammals; reptiles, which represent prey for a variety of common and special-status birds (including passerines and both local and wintering raptors); and mammal species.

Because of the relative abundance of the common wildlife species that could be displaced, as well as the extensive areas of open space that surround the project site and provide a means of escape, project implementation is not expected to reduce populations to a point that would be below a self-sustaining level or otherwise substantially affect common mammal or reptile species within the project area. Consequently, impacts on common mammal and reptile species would be less than significant.

DFG does not designate any of the plant communities found within the survey area as sensitive. The riparian area nearest to the effluent discharge point is dominated primarily by valley oaks. It is important to note that this nearest riparian area lacks the typical riparian indicator species. Also, the nearest riparian area is non-contiguous to other riparian habitat. Finally, water sources in the riparian area are man-made irrigation canals, which are used for adjacent farming practices.

The cessation of discharges into Mill Creek would reduce the amount of water available to the grove of valley oaks. However, the roots of this upper floodplain species do not need to reach the water table. Given the amount of irrigation occurring adjacent to this grove of valley oaks, it is unlikely that the cessation of discharges into Mill Creek would adversely affect the grove. Nearby irrigation would sustain the grove, even with the cessation of effluent discharges into Mill Creek. Therefore, the cessation of discharges into Mill Creek would not have a substantial adverse effect on any riparian habitat or other sensitive natural community.

The bed and bank of the portion of Mill Creek that would be affected by the cessation of effluent discharges is regularly cleared of emergent vegetation as part of routine maintenance work to enhance irrigation conveyance or control stormwater. Therefore, emergent wetland or riparian habitat is removed by maintenance activities. Because the habitat is not allowed to emerge on the creek's bed and bank, wildlife species (including special-status species) do not use the bed and bank of the portion of Mill Creek that would be affected by the project for foraging, nesting, or other purposes.

Water quality impacts resulting from the eventual cessation of discharges into Mill Creek would be the same as those occurring under the baseline condition (or water quality may actually improve). Treated water with acceptable levels of contaminants, as allowed under the plant's current National Pollutant Discharge Elimination System permit, would no longer be discharged into the creek from the plant. Instead, the channelized portion of Mill Creek would convey irrigation water from other sources or be used for stormwater control, which is part of the baseline condition. Because treated effluent with acceptable levels of contaminants would no longer be discharged into the creek, it is likely that there would be a slight reduction in the level of pollutants within the creek, such nitrate or biological oxygen demand. Therefore, it is concluded that the project would most likely have a slightly beneficial effect on water quality within Mill Creek downstream of the current effluent discharge point compared with the baseline condition.

Response to Comment G-12

The commenter states that the project would result in significant and unavoidable groundwater impacts as a result of lowering the local groundwater table downstream of the current effluent discharge point into Mill Creek. The commenter states that the Lead Agency must not approve the project with a significant effect unless the benefits of the project outweigh the unavoidable adverse environmental effects and a Statement of Overriding Considerations is adopted.

Pages 3F-12 through 3F-15 of the September 2011 DEIR discuss the significant and unavoidable impacts of the project on the local groundwater table downstream of the current effluent discharge point into Mill Creek. If the City Council decides to approve the project, a Statement of Overriding Considerations will be drafted, in compliance with State CEQA Guidelines Section 15093. The Statement of Overriding Considerations will describe how the benefits of the project outweigh the significant environmental costs. If a Statement of Overriding Considerations is drafted and adopted, it will be included as part of the financial aid package to the SWRCB.

Response to Comment G-13

The commenter thanks the City for the opportunity to review the Draft EIR and provides contact information if the City would like to talk to the SWRCB further about the project.

The comment is noted for the record.

Comment Letter H

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

Edmund G. Brown Jr.
Governor

Ken Alex
Director

November 10, 2011

James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Subject: Water Conservation Plant Upgrades Project
SCH#: 2010081057

Dear James Ross:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on November 9, 2011, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

H-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

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

Document Details Report
State Clearinghouse Data Base

SCH# 2010081057
Project Title Water Conservation Plant Upgrades Project
Lead Agency Visalia, City of

Type EIR Draft EIR

Description The project would 1) improve wastewater treatment facilities at the City's existing water conservation plant, 2) develop the initial recycled water pipeline infrastructure for disposal and reuse of treated effluent generated by the plant. The City is exploring the possibility of entering into water exchange agreements to exchange recycled water generated by the plant for surface water.

Lead Agency Contact

Name James Ross
Agency City of Visalia
Phone (559) 713-4466 **Fax**
email
Address 7579 Avenue 288
City Visalia **State** CA **Zip** 93277

Project Location

County Tulare
City Visalia
Region
Lat / Long 36° 18' 38" N / 119° 24' 40" W
Cross Streets Avenue 288 and Road 68
Parcel No. Multiple
Township 19S **Range** 24E **Section** 6 **Base** MDB&M

Proximity to:

Highways SR 99 & 198
Airports Visalia Municipal
Railways No
Waterways Mill Creek
Schools Hurley ES
Land Use GPD: Agriculture, Public Institutional, Park, and Conservation (City General Plan); Rural Valley Lands Plan (County General Plan);
ZD: Agriculture (A), Quasi-Public (QP), and Airport (AP) (City Zoning); Exclusive Agricultural - 40 acre Minimum (AE-40) (County Zoning).

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

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 4; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 6; CA Department of Public Health; State Water Resources Control Board, Divison of Financial Assistance; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Bd., Region 5 (Fresno); Department of Toxic Substances Control; Native American Heritage Commission

Date Received 09/26/2011 **Start of Review** 09/26/2011 **End of Review** 11/09/2011

Note: Blanks in data fields result from insufficient information provided by lead agency.

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

clear
11/9/11 e

October 3, 2011

RECEIVED
OCT - 7 2011
STATE CLEARING HOUSE

Mr. James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 92177

Re: SCH#2010081057; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the **"City of Visalia Water Conservation Plan Upgrades Project;"** located in Tulare County, California

Dear Mr. Ross:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604). The NAHC wishes to comment on the proposed project.

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ...objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC Sacred Lands File (SLF) search resulted as follows: **Native American cultural resources were not identified** within the USGS coordinates identified. However, the absence of archaeological resources does not preclude their existence.

The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural

significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Special reference is made to the *Tribal Consultation* requirements of the California 2006 Senate Bill 1059: enabling legislation to the federal Energy Policy Act of 2005 (P.L. 109-58), mandates consultation with Native American tribes (both federally recognized and non federally recognized) where electrically transmission lines are proposed. This is codified in the California Public Resources Code, Chapter 4.3 and §25330 to Division 15.

Furthermore, pursuant to CA Public Resources Code § 5097.95, the NAHC requests that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends *avoidance* as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 *et seq*), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 *et seq.* and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 *Secretary of the Interiors Standards for the Treatment of Historic Properties* were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's *Standards* include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for accidentally discovered archeological resources during construction and mandate the processes to be followed in the event of an accidental discovery of any human remains in a project location other than a 'dedicated cemetery'.

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

2

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

3

H. Scott Morgan, Director, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (November 10, 2011)

Response to Comment H-1

The participation of the State Clearinghouse in the public review of this document is appreciated. The commenter states that the State Clearinghouse submitted the September 2011 DEIR to the agencies identified in the Notice of Completion for review and comment. A comment letter from the NAHC (Comment Letter A, above) was forwarded to the State Clearinghouse, then attached to the State Clearinghouse letter and forwarded to the Lead Agency. The commenter also states that the Lead Agency has complied, pursuant to CEQA, with the State Clearinghouse review requirements for draft environmental documents.

The comments have been noted for the record.

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Comment Letter I

November 15, 2011

James Ross
City of Visalia
Public Work Dept.
7579 Avenue 288
Visalia, CA 93277

Project: City of Visalia Water Conservation Plant Upgrades

Dear Mr. Ross:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the Draft Environmental Impact Report (EIR) for the project referenced above. The District offers the following comments:

I-1

1. Based on information it appears that the incorporation on mitigation measures would reduce construction related NOx emissions to below the District's thresholds of significance of 10 tons per year. As such, project related emissions would be mitigated to a less than significant impact on air quality.

2. As stated in the EIR, the project is subject to District permitting requirements. Per Section 4.4.3, projects whose primary functions are subject to Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) are not subject to Rule 9510 (Indirect Source Review). Therefore, the District concludes that the project is not subject to District Rule 9510.

3. As stated in the EIR, the project would be subject to District Regulation II (Permits) requirements. The project is subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review. Per Section 4.4.3 of District Rule 9510 (Indirect Source Review), projects whose primary functions are subject to Rule 2010 and Rule 2201 are not subject to Rule 9510. Therefore, the project will not require the submittal of an Air Impact Assessment application.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

District CEQA Reference No. 20100705

I-1 cont. If you have any questions or require further information, please contact Jessica Willis by phone at (559) 230-5818 or by email at jessica.willis@valleyair.org.

Sincerely,

David Warner
Director of Permit Services

Jessica R. Willis

for Arnaud Marjollet
Permit Services Manager

DW:jw

Cc: File

I. Arnaud Marjollet, Permit Services Manager, San Joaquin Valley Air Pollution Control District (November 15, 2011)

Response to Comment I-1

The City appreciates SJVAPCD's time and effort in reviewing the September 2011 DEIR and providing comments about its content. The commenter states that SJVAPCD has reviewed the September 2011 DEIR and determined that the project, with mitigation, would reduce construction-related oxides of nitrogen (NO_X) emissions to a level below SJVAPCD's threshold of significance of 10 tons per year. The commenter goes on to state that the project is not subject to Rule 9510 (Indirect Source Review) and not required to submit an Air Impact Assessment application. The commenter also provides contact information in the event that the City would like to discuss the project further with SJVAPCD.

The comments have been noted for the record.

California Regional Water Quality Control Board
Central Valley Region
Katherine Hart, Chair

1685 E Street, Fresno, California 93706
(559) 445-5116 • FAX (559) 445-5910
http://www.waterboards.ca.gov/centralvalley

Matthew Rodriquez
Secretary for
Environmental Protection

Edmund G. Brown Jr.
Governor

Comment Letter J

1 December 2011

Mr. James Ross
Wastewater Treatment Plant Manager
City of Visalia
7579 Avenue 288
Visalia, CA 93277

DRAFT ENVIRONMENTAL IMPACT REPORT, CITY OF VISALIA WATER CONSERVATION PLANT UPGRADES PROJECT, TULARE COUNTY (SCH NO. 2010081057)

J-1

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff reviewed the draft Environmental Impact Report (draft EIR) from the City of Visalia (City) received on 28 September 2011 for a project to upgrade the City's wastewater treatment facility (WWTF). The project will improve the existing WWTF, develop recycled water infrastructure, and enable potential exchange of treated effluent for surface water supply. As one of the primary permitting agencies for the project, the Central Valley Water Board is a Responsible Agency pursuant to Section 15381 of the California Environmental Quality Act (CEQA).

The existing WWTF was upgraded in 2003 to a design treatment capacity of 22 million gallons per day (mgd). The WWTF includes headworks with grit removal, primary treatment in sedimentation basins, secondary treatment in aeration basins and trickling filters, and chlorine gas disinfection. Biosolids handling units at the WWTF consist of a gravity belt thickener, anaerobic sludge digesters, unlined sludge pits, and unlined sludge drying beds. Waste Discharge Requirements Order No. R5-2006-0091 regulates effluent discharge from the WWTF into nearby Mill Creek (a water of the United States), to percolation basins, and for reclamation on 250 acres of feed crops. Downstream of the discharge to Mill Creek, effluent is currently withdrawn by the Kaweah Delta Water Conservation District and farmers with riparian water rights.

The proposed improvements to the WWTF include installation of membrane bioreactor (MBR) basins, a new digester, and lining of the sludge drying beds and a sludge stockpiling area with asphalt concrete. The proposed project will not increase the design flow of the WWTF beyond 22 mgd. The MBR tanks will be sized for 26 mgd, but the membrane modules will be installed as needed, starting with 18 mgd. Additional improvements, like upgrading pumps and installing a new pump station, will be sized for an anticipated future upgrade of the WWTF to 44 mgd, though the CEQA document makes it clear that a project to increase the overall treatment capacity of the WWTF will require a separate CEQA determination.

J-2

As part of the project, the City plans to discontinue discharge to Mill Creek. Effluent from the WWTF will instead enter a recycled water conveyance system for irrigation of Plaza Park, Valley Oaks Golf Course, and 250 acres of farmland. However, effluent flow currently exceeds the City's irrigation needs. The draft EIR indicates that the City will use some of the excess effluent to recharge groundwater by filling City-owned Basin No. 4.

Groundwater recharge projects are subject to oversight by the California Department of Public Health. The final EIR must clarify whether Basin No. 4 is a recharge structure or whether seepage from the basin should be considered incidental recharge.

The draft EIR includes a report entitled *Evaluation of Potential Groundwater Impacts of Wastewater Treatment Plant Upgrades* (Groundwater Report), prepared by a registered hydrogeologist. The Groundwater Report presents the results of a groundwater modeling study showing how the project is expected to affect groundwater elevations, but includes no information about water quality.

The Notice of Preparation (NOP) circulated in August 2010 failed to address water quality impacts. The draft EIR indicates that additional environmental review was limited to addressing comments received on the NOP. Central Valley Water Board staff did not provide comments at that time. The final EIR needs to address potential groundwater quality impacts.

Specifically, the final EIR must assess compliance of the proposed discharges with State Water Resources Control Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California* (Antidegradation Policy). The Antidegradation Policy prohibits degradation of high quality receiving water unless it has been shown that: (a) the degradation does not result in water quality worse than that prescribed in state and regional policies, including violation of one or more water quality objectives; (b) the degradation will not unreasonably affect present and anticipated future beneficial uses; (c) the discharger employs best practicable treatment or control to minimize degradation; and (d) the degradation is consistent with maximum benefit to the people of the State. The draft EIR describes a discharge of waste that may degrade receiving water, an environmental impact, but it does not demonstrate, on a constituent-by-constituent basis, that the discharge and associated degradation will be consistent with the Antidegradation Policy and, therefore, appropriately mitigated.

By implementing advanced treatment, the project will generally improve the quality of WWTF effluent in terms of nitrogen, suspended solids, biochemical oxygen demand, and pathogens, but changes to the locations of the discharge warrant a review of potential water quality impacts. The constituent-by-constituent analysis, as described above, should compare the quality of percolated effluent as it reaches underlying groundwater with natural background groundwater quality. The effects of dilution and concentration of WWTF effluent due to precipitation, irrigation water mixing, evaporation and evapotranspiration need to be considered. A table presenting a proposed water balance, a map showing the water distribution system with discharge areas, and a list of all potential discharge areas (with Assessor's Parcel Numbers) must be included in the final EIR.

J-3

The draft EIR indicates that a "portion" of the existing sludge drying beds will be reconstructed with asphaltic concrete pavement. The final EIR will need to demonstrate that the proposed

J-3 cont. asphalt concrete liner will effectively limit percolation to protect underlying groundwater quality. The draft EIR does not explain why only a portion of the existing drying beds will be improved. An evaluation of discharges to the sludge drying beds must be included in the Antidegradation Analysis. Discharges to the sludge drying beds may be subject to prescriptive waste containment and monitoring requirements, unless the City can demonstrate that it meets the criteria for exemption described in California Code of Regulations, Title 27, Section 20090.

J-4 The final EIR needs to assess whether discharges of WWTF effluent will be in the vicinity of domestic or municipal water supply wells. Though WWTF effluent will be of good quality following the proposed improvements, staff recommends avoiding discharges near drinking water supplies.

J-5 The draft EIR describes tentative plans to discharge to the Tulare Irrigation District (TID) conveyance system at TID's Basin No. 3, from which the District will distribute effluent for groundwater recharge and application to crops. However, the draft EIR makes it clear that the City has yet to enter into any such water exchange agreements and discharges other than what is described in the draft EIR are outside the scope of the current project. Discharges associated with water exchange agreements will have to undergo separate environmental review, which will need to include water quality considerations similar to those required for this project (e.g. Antidegradation Analysis). In particular, given TID's history of exchanging water with other districts (including exchanges to the Southern San Joaquin Municipal Utility District), such a review will need to include a detailed analysis of where WWTF effluent may go and how it may be used.

J-6 The draft EIR lists agencies and approval requirements for the project. Under the State Water Board and the Central Valley Water Board requirements, it only lists the Statewide General Construction NPDES permit. The list should also include updated Waste Discharge Requirements. The City submitted an application for updated WDRs in August 2010.

If you have any questions regarding these comments, please contact Steve Popenoe at (559) 444 2418.

W. DALE HARVEY
Sr WRC Engineer
RCE No. 55628

cc: State Clearinghouse, Sacramento

J. W. Dale Harvey, Senior WRC Engineer, Central Valley Regional Water Quality Control Board (December 1, 2011)

Response to Comment J-1

The City appreciates the Central Valley RWQCB's time and effort in reviewing the September 2011 DEIR and providing comments about its content. The commenter provides an overview of the project.

The comment has been noted for the record.

Response to Comment J-2

The commenter states that the some of the excess effluent would be discharged to City Basin No. 4; therefore, the project could be considered a recharge project and under the oversight of the California Department of Public Health. The commenter requests clarification as to whether the basin is a recharge structure or if seepage should be considered incidental to recharge. The commenter goes on to state that, although the project groundwater modeling efforts include elevations, the project does not include a discussion about water quality compliance with SWRCB Resolution No. 68-16. The commenter goes on to state that by implementing advanced treatment, the project would generally improve the overall quality of the effluent for a number of constituents but that changes to the location of discharge warrant a review of potential water quality impacts. The commenter requests a constituent-by-constituent analysis (antidegradation analysis) that compares the quality of the percolated effluent as it reaches the underlying groundwater with natural background water quality. The analysis also considers the effects of dilution and concentration and includes a table of water balance as well as a map showing potential discharge areas.

The City Basin No. 4 is an existing structure that would be used when the recycled water volume exceeds demand within the use area. The City considers it a holding basin, and any seepage should be considered incidental recharge. It is important to note that the basin is currently being used to hold, from time to time, discharges from the treatment plant. These current discharges are not treated to Title 22 standards. Therefore, with implementation of the project, the quality of water received by the basin would actually improve compared with the baseline condition.

In response to this comment, the City prepared an antidegradation analysis (see Appendix A of the recirculated DEIR). The results of the analysis and a discussion of the project's effect on groundwater quality are provided in Section 3B, *Hydrology and Water Quality*, of the recirculated DEIR. The analysis compares the quality of the percolated effluent as it reaches the underlying groundwater with natural background water quality. It also considers the effects of dilution and concentration and includes a table of water balance as well as a map showing potential discharge areas.

The following is a summary of the conclusions of the antidegradation analysis.

Of the 26 constituents that occur in groundwater and may be found in the proposed project's effluent, four are considered constituents of concern: chloride, electrical conductivity (EC), sodium, and total dissolved solids (TDS). The antidegradation analysis modeled the proposed project's effect on the concentration of these constituents in the groundwater that underlies the recycled water use

area. The modeling assumed that, at the current effluent production rate of 13 mgd at the water conservation plant, there would be an increase in effluent production of 2.5% per year over the next 20 years, for a maximum permitted effluent production rate of almost 21 mgd by 2025. The rate of increase in effluent production, 2.5% per year, is based on the projected rate of increase found in the Visalia Water Conservation Plant 2008 Master Plan. A 20-year timeframe was used because it matches the proposed length of the water exchange agreement. The modeling also assumed that within the recycled water use area, recycled water would be applied to basins and use areas totaling approximately 10,100 acres.

It was determined that the proposed project would not contribute to constituent concentrations of chloride, sodium, or TDS that would be in excess of the groundwater quality objectives outlined in the Basin Plan or the agricultural guidelines over the 20-year modeling period. The proposed project would not cause groundwater degradation or affect beneficial uses. Therefore, no further discussion is required for these constituents. However, preliminary analysis could not eliminate from further consideration the possibility that increased EC levels as a result of the proposed project could degrade groundwater quality beneath the recycled water use area. The Porter-Cologne Act recognizes that "it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses." Additionally, the Basin Plan acknowledges that "no proven means exist at present time that will allow ongoing human activity in the basin and maintain groundwater salinity at current levels throughout the basin. Accordingly, the water quality objectives for groundwater salinity control the rate of increase."

The antidegradation analysis went on to model in greater detail the effects of the proposed project on groundwater EC levels within the recycled water use area over a 20-year period.

Over the 20-year modeling period, the proposed project would result in an annual increase in EC levels of less than 3 micromhos per centimeter (µmhos/cm) when averaged over a 5-year period. This averaged annual increase in EC levels would be less than that of the groundwater quality objective found in the Basin Plan (i.e., a maximum annual increase of 3 µmhos/cm averaged over a 5-year period). Additionally, the modeled EC levels for groundwater that would underlie the recycled water use area after 20 years would be about 553 µmhos/cm, which is less than the 700 µmhos/cm value found in the agricultural guidelines. Therefore, the proposed project would not violate the groundwater quality standards for EC found in the Basin Plan or the agricultural guidelines.

SWRCB's Recycled Water Policy says that "the Regional Water Boards shall, absent unusual circumstances…permit recycled water projects that meet the criteria set forth in this policy…" The Recycled Water Policy also says that "when used in compliance with this policy, Title 22, and all applicable state and federal water quality laws, the State Water Board finds that recycled water is safe for approved uses and strongly supports recycled water as a safe alternative to potable water for such approved uses."

Because the proposed project would not significantly affect existing or potential future beneficial uses of the receiving groundwater over the long term, the proposed project would be in compliance with SWRCB Resolution No. 68-16 as well as the Recycled Water Policy. Also, the proposed project would treat influent received at the plant to Title 22 standards.

In light of the aforementioned policies, it can be concluded that the proposed project would not violate federal or state antidegradation policies or any groundwater quality standards.

Response to Comment J-3

The commenter states that the Final EIR should demonstrate, as part of the antidegradation analysis, that the proposed concrete liner would limit percolation to protect underlying groundwater quality.

All of the existing sludge drying beds that would be used on this project would be reconstructed with a complete asphalt concrete pavement system consisting of the following: 4 inches of asphalt concrete pavement underlain by 5 inches of aggregate base, Type "D," compacted to 95% maximum density underlain by 3 inches of sand backfill, Type "C," compacted to 95% maximum density underlain by a 60-millimeter PVC geomembrane liner with continuous solvent-welded lap joints and sealed dead ends underlain by 18 inches of scarified subgrade compacted to 90% maximum dry density. This complete asphalt concrete pavement system (liner) would prohibit percolation and protect groundwater quality. Also, as part of this project, a small portion of the existing sludge drying beds would be decommissioned and taken out of service by the City. The beds would not be reconstructed.

Response to Comment J-4

The commenter states that the Final EIR will need to assess whether the effluent will be discharged near domestic or municipal water supply wells.

The effluent, which would be treated to Title 22 standards as part of the project, would not be discharged near domestic or municipal water supply wells. Such wells are found on the eastside of the City; the treated effluent would be conveyed to TID facilities for irrigation use as part of the proposed water exchange or to City Basin No. 4, both of which are west of the City and its treatment plant. The treated effluent would also be conveyed to farmland south of the treatment plant or to Plaza Park and Valley Oaks Golf Course, located just east of the plant but well west of the City's domestic and municipal water supply wells.

Response to Comment J-5

The commenter reiterates what was stated in the September 2011 DEIR, stating that possible future water exchanges would have to undergo separate environmental review and include information regarding water quality considerations, where future effluent would go, and how it would be used.

The City concurs with the comment and has noted it for the record. The recirculated DEIR provides adequate environmental review, per CEQA, for the possible water exchange between the City and TID, including information regarding water quality considerations, where future effluent would go, and how it would be used.

Response to Comment J-6

The commenter states that the list of required approvals should include updated Waste Discharge Requirements, which would need to be approved by the RWQCB.

Please see Chapter 3 for revisions to page ES-7 and page 2-16 regarding the need to obtain updated Waste Discharge Requirements for the project. The revisions do not change the significance determinations in the September 2011 DEIR.

Comment Letter K

TULARE COUNTY
HEALTH & HUMAN SERVICES AGENCY
DEPARTMENT OF ADMINISTRATION · KEVIN MARKS · DIRECTOR
ENVIRONMENTAL HEALTH SERVICES · VIVIAN NELSON, MSEE REHS · DIVISION MANAGER

Cheryl L. Duerksen, Ph.D.,
Agency Director

November 5, 2012

JAMES ROSS
CITY OF VISALIA
7579 AVENUE 288
VISALIA CA 93277

Re: DEIR- CITY OF VISALIA WATER CONSERVATION PLANT UPGRADES

Dear Mr. Ross:

K-1 This office has reviewed the above referenced matter. Based upon our review, we have no comments for this project at this time.

Sincerely,

Allison Shuklian
Environmental Health Specialist
Environmental Health Services Division

5957 S. Mooney Blvd., Visalia, CA 93277 · 559.624.7400 / FAX 559.733.6932

K. Allison Shuklian, Environmental Health Specialist, Tulare County Health and Human Services Agency (November 5, 2012)

Response to Comment K-1

The City appreciates the Tulare County Health and Human Services Agency's time and effort in reviewing the recirculated DEIR and providing comments about its content. The commenter states that the agency has no comments for the project at this time.

The comment has been noted for the record.

Comment Letter L

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 6
1352 WEST OLIVE AVENUE
P.O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 488-7396
FAX (559) 488-4088
TTY (559) 488-4066

Flex your power!
Be energy efficient!

November 5, 2012

2135-IGR/CEQA
6-TUL-99-38.032 +/-
CITY OF VISALIA
WATER CONSERVATION PLANT UPGRADES
RECIRCULATED DEIR
SCH# 2010081057

Mr. James Ross, Public Works Manager
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Dear Mr. Ross:

L-1 Thank you for the opportunity to review the Re-circulated Draft Environmental Impact Report for the City of Visalia Water Conservation Plant Upgrades Project. The existing wastewater treatment plant is located at the southeast corner of the intersection of Road 68 and Avenue 288. The proposed recycled water conveyance system would extend away from the treatment plant to the southwest and east. The eastern alignment of the conveyance system would extend away from the southern fence line of the plant, continue east, go under State Route (SR) 99 and traverse the southern boundary of the Visalia Municipal Airport. At the southeastern of corner of the airport, the conveyance system would split into three arms, with one arm going to the north along Plaza Drive and terminating just south of the intersection of State Route 198 and Plaza Drive. Caltrans has the following comments:

Caltrans reviewed the Draft Environmental Impact Report (DEIR) in October 2011. The previous Caltrans comments dated 10/1/2010 (as included in the DEIR) and 10/5/2011 (copy enclosed) continue to be valid.

If you have any questions, please call me at (559) 488-7396.

Sincerely,

DAVID DEEL
Associate Transportation Planner
District 6

Enclosure

"Caltrans improves mobility across California"

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 6
1352 WEST OLIVE AVENUE
P.O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 488-7396
FAX (559) 488-4088
TTY (559) 488-4066

Flex your power!
Be energy efficient!

October 5, 2011

2135-IGR/CEQA
6-TUL-99-38.032 +/-
DEIR
CITY OF VISALIA
WATER CONSERVATION PLANT UPGRADES
SCH# 2010081057

Mr. James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Dear Mr. Ross:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the Water Conservation Plant Upgrades Project. The existing wastewater treatment plant is located at the southeast corner of the intersection of Road 68 and Avenue 288. The proposed recycled water conveyance system would extend away from the treatment plant to the southwest and east. The eastern alignment of the conveyance system would extend away from the southern fence line of the plant, continue east, go under State Route (SR) 99 and traverse the southern boundary of the Visalia Municipal Airport. At the southeastern of corner of the airport, the conveyance system would split into three arms, with one arm going to the north along Plaza Drive and terminating just south of the intersection of State Route 198 and Plaza Drive. Caltrans has the following comments:

The previous Caltrans comments dated 10/1/2010 (as included in the DEIR) continue to be valid.

Please send a response to our comments prior to staff's recommendations to the Planning Commission and/or the City Council. Also please provide a copy of the resolution approving the project. If you have any questions, please call me at (559) 488-7396.

Sincerely,

DAVID DEEL
Associate Transportation Planner
District 6

"Caltrans improves mobility across California"

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
1352 WEST OLIVE AVENUE
P.O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 488-7306
FAX (559) 488-4088
TTY (559) 488-4066

Flex your power!
Be energy efficient!

October 1, 2010

2135-IGR/CEQA
6-TUL-99-38.032 +/-
NOP FOR DEIR
WATER CONSERVATION PLANT
SCH# 2010081057

Mr. James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Dear Mr. Ross

Thank you for the opportunity to review the Notice of Preparation (NOP) of a Water Conservation Plant Upgrades Project Draft Environmental Impact Report (DEIR). The existing waster water treatment plant is located in the southeast corner of the intersection of Road 68 and Avenue 288 in Visalia, California. The proposed recycled water conveyance system would extend away from the treatment plant to the west and east. The eastern alignment of the conveyance system would extend away from the southern fence line of the plant, continue east, go under State Route (SR) 99 and traverse the southern boundary of the Visalia Municipal Airport. The southeastern of corner of the airport, the conveyance system would split, with one arm going to the north along Plaza Drive and terminating near to and south of the intersection of State Route 198 and Plaza Drive. Caltrans has the following comments:

An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights-of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work in the State right-of-way may be submitted using English Units. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations." Encroachment permits do not run with the land. A change of ownership requires a new permit application.

If landscaping is eliminated/disturbed replacement of landscaping plans shall meet current standards as determined by the District Landscape Architect. All features of landscaping shall be evaluated for type, location and site visibility conflicts during the encroachment review process. All permits for landscaping in conventional highway right-of-way must be accompanied by a "District" approved maintenance agreement obligating a local agency or the permittee to maintaining the landscaping. Said maintenance agreement must accompany and be approved prior to issuance of the landscape permit.

"Caltrans improves mobility across California"

Ms. Sandra Cloyd
October 1, 2010
Page 2

Proposed landscape projects in access control rights-of-way require an exception process, and approval is subject to the Headquarters Departmental approval process.

Dust control measures shall be implemented on the site in a manner to prevent dust from entering the State right-of-way.

A preliminary cost estimate for all proposed work within the State right of way needs to be submitted with an encroachment permit application to determine how the project will be processed through the Department. The project will be considered a "special funded project" and shall be handled by Project Development and Project Management if the project cost exceeds $1,000,000 excerpt for utility projects.

The proposed jack and bore operation to construct a pipeline under SR 99 as indicated in the initial study section XVI-Transportation/Traffic a and b. These items must meet the requirements of Caltrans Encroachment Permit Manual, Section 623 must be met for all tunneling and/or jacking operations:

- The bore and receivings pits shall be located outside State right of way.
- Easement is required for all utility encroachments. Table 6.9 provides thickness requirements for all utility encroachments. Table 6.9 provides thickness requirements for steel pipe casings.
- The casing shall extend from right of way line to right of way line.
- The depth of cover, depending on pipe diameter, will be as per minimum recommended in Section 623.D Permit Application Submittal, under no circumstances less than 42 Inches within the State right of way.

This Encroachment Permit manual may be found at our website:
http://www.dot.hq/trafficops/developserv/permits/applications/index.html.

Please be advised that any future development adjacent to a State Route, whether the entitlement is deemed by the lead agency to be discretionary or ministerial should be sent to Caltrans for review. Please send a response to our comments and a copy of the Council resolution for the proposed project. If you have any questions, please call me at (559) 448-7306.

Sincerely,

PAUL-ALBERT MARQUEZ
North Planning Branch Chief

Lorena Mendibles

Lorena Mendibles
Transportation Planner
District 6

C: State Clearinghouse

"Caltrans improves mobility across California"

L. David Deel, Associate Transportation Planner, California Department of Transportation, District 6 (November 5, 2012)

Response to Comment L-1

The City appreciates Caltrans' time and effort in reviewing the recirculated DEIR and providing comments about its content. The commenter states that Caltrans' comments on the NOP/IS and September 2011 DEIR, as outlined in its comment letters dated October 1, 2010 (see Appendix B of the September 2011 DEIR), and October 5, 2011 (Comment Letter B, above), continue to be valid. In those comment letters, Caltrans states that an encroachment permit must be obtained for all proposed activities that encroach within, under, or over state highway rights-of-way. The letters state that all work is to be performed to state standards at no cost to the state and that all plans, calculations, specifications, etc., are to be stamped and signed by a licensed engineer or architect to be approved by Caltrans. The letters also state that if landscaping is eliminated or disturbed, the replacement landscaping must meet current standards and be approved as part of the landscape permit process. Additionally, the letters state that a landscape maintenance agreement must accompany the permit application and be approved prior to issuance of the landscape permit. The letters state that dust control measures shall be implemented and that a preliminary cost estimate must be submitted with the encroachment permit application. Finally, the letters state that proposed jack-and-bore operations must meet the requirements of the Caltrans Encroachment Permit Manual, Section 623.

The City concurs with Caltrans' recommendations and will implement them as part of the project. The September 2011 DEIR states, on pages 3I-5 and 3I-6, that the City will meet all Caltrans requirements specified in the department's NOP/IS comment letter dated October 10, 2010.

Comment Letter M

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

December 11, 2012

James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Project: Recirculated Draft Environmental Impact Report
City of Visalia Water Conservation Plant Upgrades Project

District CEQA Reference No: 20120714

Dear Mr. Ross:

M-1 The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the recirculated Draft Environmental Impact Report referenced above consisting of proposing to enter into a water exchange agreement with the Tulare Irrigation District, located in the northwestern portion of Tulare County, in Visalia, CA. The District has previously commented on this project and has no additional comments at this time.

District staff is available to meet with you and/or the applicant to further discuss the regulatory requirements that are associated with this project. If you have any questions or require further information, please call Sharla Yang at (559) 230-5934.

Sincerely,

David Warner
Director of Permit Services

Sharla Yang

for: Arnaud Marjollet
Permit Services Manager

DW: sy

cc: File

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

M. Arnaud Marjollet, Permit Services Manager, San Joaquin Valley Air Pollution Control District (December 11, 2012)

Response to Comment M-1

The City appreciates SJVAPCD's time and effort in reviewing the recirculated DEIR and providing comments about its content. The commenter states that SJVAPCD has previously commented on the project (Comment Letter I) and has no additional comments at this time.

The comment has been noted for the record.

Comment Letter N

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

Edmund G. Brown Jr.
Governor

Ken Alex
Director

December 13, 2012

James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Subject: Water Conservation Plant Upgrades Project
SCH#: 2010081057

Dear James Ross:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on December 12, 2012, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

N-1

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

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

Document Details Report
State Clearinghouse Data Base

SCH# 2010081057
Project Title Water Conservation Plant Upgrades Project
Lead Agency Visalia, City of

Type EIR Draft EIR
Description Note: Recirculated

The project would 1) improve wastewater treatment facilities at the City's existing water conservation plant, 2) develop the initial recycled water pipeline infrastructure for disposal and reuse of treated effluent generated by the plant. The City is exploring the possibility of entering into water exchange agreements to exchange recycled water generated by the plant for surface water.

Lead Agency Contact

Name James Ross
Agency City of Visalia
Phone (559) 713-4466 **Fax**
email
Address 7579 Avenue 288
City Visalia **State** CA **Zip** 93277

Project Location

County Tulare
City Visalia
Region
Lat / Long 36° 18' 38" N / 119° 24' 40" W
Cross Streets Avenue 288 and Road 68
Parcel No. Multiple
Township 19S **Range** 24E **Section** 6 **Base** MDB&M

Proximity to:

Highways SR 99 & 198
Airports Visalia Municipal
Railways No
Waterways Mill Creek
Schools Hurley ES
Land Use GPD: Agriculture, Public Institutional, Park, and Conservation (City General Plan); Rural Valley Lands Plan (County General Plan);
ZD: Agriculture (A), Quasi-Public (QP), and Airport (AP) (City Zoning); Exclusive Agricultural - 40 acre Minimum (AE-40) (County Zoning).

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

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 4; Office of Historic Preservation; Department of Parks and Recreation; Central Valley Flood Protection Board; Department of Water Resources; California Highway Patrol; Caltrans, District 6; CA Department of Public Health; State Water Resources Control Board, Divison of Financial Assistance; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Bd., Region 5 (Fresno); Department of Toxic Substances Control; Native American Heritage Commission

Date Received 10/29/2012 **Start of Review** 10/29/2012 **End of Review** 12/12/2012

11/06/2012 07:58 5594455875 PAGE 01/05

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 6
1352 WEST OLIVE AVENUE
P.O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 488-7396
FAX (559) 488-4088
TTY (559) 488-4066

C/ESA
12/12/12
e

Flex your power!
Be energy efficient!

November 5, 2012

2135-IGR/CEQA
6-TUL-99-38.032 +/-
CITY OF VISALIA
WATER CONSERVATION PLANT UPGRADES
RECIRCULATED DEIR
SCH# 2010081057

Mr. James Ross, Public Works Manager
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Post-it® Fax Note 7671	Date 11/6/12	# of pages ▶ 5
To SCH	From ALEC KIMMEL	
Co./Dept.	Co. CALTRANS D6	
Phone #	Phone #	
Fax # 916-323-3018	Fax #	

Dear Mr. Ross:

Thank you for the opportunity to review the Re-circulated Draft Environmental Impact Report for the City of Visalia Water Conservation Plant Upgrades Project. The existing wastewater treatment plant is located at the southeast corner of the intersection of Road 68 and Avenue 288. The proposed recycled water conveyance system would extend away from the treatment plant to the southwest and east. The eastern alignment of the conveyance system would extend away from the southern fence line of the plant, continue east, go under State Route (SR) 99 and traverse the southern boundary of the Visalia Municipal Airport. At the southeastern of corner of the airport, the conveyance system would split into three arms, with one arm going to the north along Plaza Drive and terminating just south of the intersection of State Route 198 and Plaza Drive. Caltrans has the following comments:

Caltrans reviewed the Draft Environmental Impact Report (DEIR) in October 2011. The previous Caltrans comments dated 10/1/2010 (as included in the DEIR) and 10/5/2011 (copy enclosed) continue to be valid.

If you have any questions, please call me at (559) 488-7396.

Sincerely,

DAVID DEEL
Associate Transportation Planner
District 6

Enclosure

"Caltrans improves mobility across California"

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 6
1352 WEST OLIVE AVENUE
P.O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 488-7396
FAX (559) 488-4088
TTY (559) 488-4066

Flex your power!
Be energy efficient!

October 5, 2011

2135-IGR/CEQA
6-TUL-99-38.032 +/-
DEIR
CITY OF VISALIA
WATER CONSERVATION PLANT UPGRADES
SCH# 2010081057

Mr. James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Dear Mr. Ross:

Thank you for the opportunity to review the Draft Environmental Impact Report (DEIR) for the Water Conservation Plant Upgrades Project. The existing wastewater treatment plant is located at the southeast corner of the intersection of Road 68 and Avenue 288. The proposed recycled water conveyance system would extend away from the treatment plant to the southwest and east. The eastern alignment of the conveyance system would extend away from the southern fence line of the plant, continue east, go under State Route (SR) 99 and traverse the southern boundary of the Visalia Municipal Airport. At the southeastern of corner of the airport, the conveyance system would split into three arms, with one arm going to the north along Plaza Drive and terminating just south of the intersection of State Route 198 and Plaza Drive. Caltrans has the following comments:

The previous Caltrans comments dated 10/1/2010 (as included in the DEIR) continue to be valid.

Please send a response to our comments prior to staff's recommendations to the Planning Commission and/or the City Council. Also please provide a copy of the resolution approving the project. If you have any questions, please call me at (559) 488-7396.

Sincerely,

DAVID DEEL
Associate Transportation Planner
District 6

"Caltrans improves mobility across California"

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
1352 WEST OLIVE AVENUE
P.O. BOX 12616
FRESNO, CA 93778-2616
PHONE (559) 488-7306
FAX (559) 488-4088
TTY (559) 488-4066

Flex your power!
Be energy efficient!

RECEIVED
NOV 06 2012
STATE CLEARING HOUSE

October 1, 2010

2135-IGR/CEQA
6-TUL-99-38.032 +/-
NOP FOR DEIR
WATER CONSERVATION PLANT
SCH# 2010081057

Mr. James Ross
City of Visalia
7579 Avenue 288
Visalia, CA 93277

Dear Mr. Ross

Thank you for the opportunity to review the Notice of Preparation (NOP) of a Water Conservation Plant Upgrades Project Draft Environmental Impact Report (DEIR). The existing waster water treatment plant is located in the southeast corner of the intersection of Road 68 and Avenue 288 in Visalia, California. The proposed recycled water conveyance system would extend away from the treatment plant to the west and east. The eastern alignment of the conveyance system would extend away from the southern fence line of the plant, continue east, go under State Route (SR) 99 and traverse the southern boundary of the Visalia Municipal Airport. The southeastern of corner of the airport, the conveyance system would split, with one arm going to the north along Plaza Drive and terminating near to and south of the intersection of State Route 198 and Plaza Drive. Caltrans has the following comments:

An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights-of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work in the State right-of-way may be submitted using English Units. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations." Encroachment permits do not run with the land. A change of ownership requires a new permit application.

If landscaping is eliminated/disturbed replacement of landscaping plans shall meet current standards as determined by the District Landscape Architect. All features of landscaping shall be evaluated for type, location and site visibility conflicts during the encroachment review process. All permits for landscaping in conventional highway right-of-way must be accompanied by a "District" approved maintenance agreement obligating a local agency or the permittee to maintaining the landscaping. Said maintenance agreement must accompany and be approved prior to issuance of the landscape permit.

"Caltrans improves mobility across California"

Proposed landscape projects in access control rights-of-way require an exception process, and approval is subject to the Headquarters Departmental approval process.

Dust control measures shall be implemented on the site in a manner to prevent dust from entering the State right-of-way.

A preliminary cost estimate for all proposed work within the State right of way needs to be submitted with an encroachment permit application to determine how the project will be processed through the Department. The project will be considered a "special funded project" and shall be handled by Project Development and Project Management if the project cost exceeds $1,000,000 excerpt for utility projects.

The proposed jack and bore operation to construct a pipeline under SR 99 as indicated in the initial study section XVI-Transportation/Traffic a and b. These items must meet the requirements of Caltrans Encroachment Permit Manual, Section 623 must be met for all tunneling and/or jacking operations:

- The bore and receivings pits shall be located outside State right of way.
- Easement is required for all utility encroachments. Table 6.9 provides thickness requirements for all utility encroachments. Table 6.9 provides thickness requirements for steel pipe casings.
- The casing shall extend from right of way line to right of way line.
- The depth of cover, depending on pipe diameter, will be as per minimum recommended in Section 623.D Permit Application Submittal, under no circumstances less than 42 Inches within the State right of way.

This Encroachment Permit manual may be found at our website:
http://www.dot.hq/trafficops/developserv/permits/applications/index.html.

Please be advised that any future development adjacent to a State Route, whether the entitlement is deemed by the lead agency to be discretionary or ministerial should be sent to Caltrans for review. Please send a response to our comments and a copy of the Council resolution for the proposed project. If you have any questions, please call me at (559) 448-7306.

Sincerely,

PAUL-ALBERT MARQUEZ
North Planning Branch Chief

Lorena Mendibles

Lorena Mendibles
Transportation Planner
District 6

C: State Clearinghouse

"Caltrans improves mobility across California"

11/06/2012 07:58 5594455875 PAGE 05/05

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2010081057

Project Title: Water Conservation Plant Upgrades Project

Lead Agency: City of Visalia — Contact Person: James Ross

Mailing Address: 7579 Avenue 288 — Phone: 559-713-4466

City: Visalia — Zip: 93277 — County: Tulare

Project Location: County: Tulare — City/Nearest Community: Visalia

Cross Streets: Avenue 288 and Road 68 — Zip Code: 93277

Lat. / Long.: 36° 18' 38" N/ 119° 24' 40" W — Total Acres: 110

Assessor's Parcel No.: Multiple — Section: 6 — Twp.: 19S — Range: 24E — Base: MDBM

Within 2 Miles: State Hwy #: SR-99 and SR-198 — Waterways: Mill Creek

Airports: Visalia Municipal Airport — Railways: None — Schools: Hurley Elementary School

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other Recirculated DEIR

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI ☐ Other ☐ Joint Document ☐ Final Document ☐ Other

RECEIVED
OCT 29 2012
STATE CLEARING HOUSE

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan ☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan ☐ Rezone ☒ Use Permit ☐ Land Division (Subdivision, etc.) ☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational
☐ Recreational
☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type ____
☐ Mining: Mineral ____
☐ Power: Type ____ MW ____
☒ Waste Treatment: Type Title 22 Standards MGD 22
☐ Hazardous Waste: Type ____
☐ Other: ____

Project Issues Discussed in Document:

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

Present Land Use/Zoning/General Plan Designation:

General Plan Designations: Agriculture, Public Institutional, Park, and Conservation (City General Plan); Rural Valley Lands Plan (County General Plan); Zoning Designations: Agriculture (A), Quasi-Public (QP), and Airport (AP) (City Zoning); Exclusive Agricultural--40 Acre Minimum (AE-40) (County Zoning)

Project Description: *(please use a separate page if necessary)*

The project would 1) improve wastewater treatment facilities at the City's existing water conservation plant and 2) develop the initial recycled water pipeline infrastructure for disposal and reuse of treated effluent generated by the plant. Since the circulation of the previous DEIR, the City is now proposing to enter into a water exchange agreement with the Tulare Irrigation District. This significant new information was not disclosed in the previous DEIR and therefore, the City is recirculating the DEIR to solicit public comment about this significant change to the project.

pff

State Clearinghouse Contact: (916) 445-0613

State Review Began: 10.29 - 2012

SCH COMPLIANCE 12.12 - 2012

Note: Recirculated

Please note State Clearinghouse Number (SCH#) on all Comments

SCH#: 2010081057

Please forward late comments directly to the Lead Agency

AQMD/APCD 37

(Resources: 11, 3)

Project Sent to the following State Agencies

- X Resources
- ____ Boating & Waterways
- ____ Coastal Comm
- ____ Colorado Rvr Bd
- ____ Conservation
- X Fish & Game # 4
- ____ Delta Protection Comm
- ____ Cal Fire
- X Historic Preservation
- X Parks & Rec
- X Central Valley Flood Prot.
- ____ Bay Cons & Dev Comm.
- X DWR
- ____ Cal EMA
- ____ Resources, Recycling and Recovery

Bus Transp Hous
- ____ Aeronautics
- X CHP
- X Caltrans # 10
- ____ Trans Planning
- ____ Housing & Com Dev
- ____ Food & Agriculture
- X Public Health

State/Consumer Svcs
- ____ General Services

Cal EPA
- ____ ARB: Airport/Energy Projects
- ____ ARB: Transportation Projects
- ____ ARB: Major Industrial Projects
- X SWRCB: Div. Financial Assist.
- ____ SWRCB: Wtr Quality
- X SWRCB: Wtr Rights
- X Reg. WQCB # 5F
- X Toxic Sub Ctrl-CTC

Yth/Adlt Corrections
- ____ Corrections

Independent Comm
- ____ Energy Commission
- X NAHC
- ____ Public Utilities Comm
- ____ State Lands Comm
- ____ Tahoe Rgl Plan Agency

____ Conservancy

____ Other: ____

RECEIVED
OCT 31 2012
DEPT. OF TRANSPORTATION DIST. 6
TIME: ____
ATTENTION: ____

On Mail Sheet Oct. 29, 2012

11/05/2012 21:59 9162274756 PAGE 01

State of California DEPARTMENT OF WATER RESOURCES The Resources Agency

FAX COVER SHEET

To	Office of Planning and Research	From	Rebecca Mills
Organization		Organization	DWR - Division of Safety of Dams
Location (Building/ Room Number)	1400 Tenth Street, Room 121	Location (Building/ Room Number)	2200 X St. Ste. 200
FAX Number		FAX Number	(916) 227-4500
Telephone Number	(916) 323-3018	Telephone Number	(916) 227-9800
Total Number of Pages Sent (including this sheet)	2	Date	

COMMENTS:

Discard copy ☐
Original letter to follow ☐

If you do not receive all pages, or have any problems with receiving this fax, please call: _____

DWR 4210 (Rev. 01/00)

N. Scott Morgan, Director, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit (December 13, 2012)

Response to Comment N-1

The participation of the State Clearinghouse in the public review of this document is appreciated. The commenter states that the State Clearinghouse submitted the recirculated DEIR to the agencies identified in the Notice of Completion for review and comment. A comment letter from Caltrans (Comment Letter L, above) was forwarded to the State Clearinghouse, then attached to the State Clearinghouse letter and forwarded to the Lead Agency. The commenter also states that the Lead Agency has complied, pursuant to CEQA, with the State Clearinghouse review requirements for draft environmental documents.

The comments have been noted for the record.

Chapter 3

Errata and Clarifications to the Draft EIR

Chapter 3
Errata and Clarifications to the Draft EIR

Introduction

As provided in Section 15088(c) of the State CEQA Guidelines, responses to comments may take the form of a revision to a draft EIR or may be a separate section in a final EIR. This section complies with the latter and provides changes to the September 2011 DEIR and recirculated DEIR (collectively, the Draft EIR) in revision-mode text (i.e., deletions are shown with ~~strikethrough~~ and additions are shown with <u>underline</u>). These notations are meant to provide clarification, corrections, or minor revisions as needed as a result of public comments or because of changes in the project since the release of the Draft EIR.

Changes and Clarifications to the September 2011 DEIR

The following changes and clarifications to the text, tables, and figures of the September 2011 DEIR are incorporated into the Final EIR as presented below. These changes and clarifications have been organized by September 2011 DEIR page order. These changes and clarifications do not affect significance conclusions, and changes to the September 2011 DEIR mitigation measures described below do not affect the effectiveness of any mitigation measure described in the September 2011 DEIR.

Page ES-7

Other Responsible Agencies

- California Department of Transportation (Caltrans)—right-of-way encroachment permit.
- County of Tulare—~~Responsible Agency~~ <u>road encroachment permit</u>.
- State Water Board/Central Valley RWQCB—Statewide General Construction NPDES permit <u>and updated Waste Discharge Requirements.</u>
- State Water Board/Division of Financial Assistance—SRF Loan Program application and CEQA-Plus approval.
- San Joaquin Valley Air Pollution Control District (SJVAPCD) approvals—permit to construct/operate and Rule 2010 permit.
- Tulare County Airport Land Use Commission—the project is located within the Tulare County Airport Land Use Compatibility Plan area; consequently, all construction activities would have to be reviewed and approved by this Commission.

The preceding is not necessarily a comprehensive list of all discretionary permits/approvals required.

Page 2-15

Schedule and Workforce

Construction of the proposed project—from site preparation to startup—is planned from the ~~first~~ third quarter of ~~2012~~ 2013 through the second quarter of ~~2014~~ 2016. The onsite construction workforce would consist of laborers, craftspeople, supervisory personnel, support personnel, and construction management personnel. The onsite assembly and construction workforce for the plant upgrades and recycled water conveyance system is expected to reach a peak of approximately 150 workers; the average number of workers for the duration of construction is anticipated to be approximately 75.

Page 2-16

Other Responsible Agencies

- California Department of Transportation (Caltrans)—right-of-way encroachment permit.
- County of Tulare—~~Responsible Agency~~ road encroachment permit.
- State Water Board/Central Valley RWQCB—Statewide General Construction NPDES permit and updated Waste Discharge Requirements.
- State Water Board/Division of Financial Assistance—SRF Loan Program application and CEQA-Plus approval.
- San Joaquin Valley Air Pollution Control District (SJVAPCD) approvals—permit to construct/operate and Rule 2010 permit.
- Tulare County Airport Land Use Commission—the project is located within the Tulare County Airport Land Use Compatibility Plan area; consequently, all construction activities would have to be reviewed and approved by this Commission.

The preceding is not necessarily a comprehensive list of all discretionary permits/approvals required.

Page 3B-15

MM BIO-2: Implement Burrowing Owl Avoidance Measures

A qualified biologist shall conduct a survey for burrowing owls at the project site concurrently with the San Joaquin kit fox den survey (no more than 14 days prior to the initiation of construction activities). If any burrowing owl burrows are observed, avoidance measures shall be consistent with those included in the DFG staff report on burrowing owl mitigation (California Department of Fish and Game ~~1995~~ 2012). If occupied burrowing owl burrows are observed outside of the breeding season (September 1 through January 31) and within ~~250 feet of proposed construction activities~~ the buffer allowances per the 2012 staff report, a passive relocation effort may be instituted. During the breeding season (February 1 through August 31), a ~~250-foot (minimum)~~ no-construction buffer zone shall be maintained per the 2012 staff report guidance unless a biologist, in consultation with DFG, verifies through noninvasive methods that the birds have either not begun egg laying and

incubation or that juveniles from the occupied burrows are foraging independently and capable of independent survival.

Page 3B-15

MM BIO-3: Implement Swainson's Hawk Avoidance Measures

A qualified biologist shall conduct preconstruction surveys of the proposed recycled water conveyance system alignment to identify any Swainson's hawk individuals that may be nesting within 10 miles of the project site. If a Swainson's hawk is found within 10 miles of the project site, the mitigation measures in the *Staff Report Regarding Mitigation Impacts for Swainson's Hawks* (Buteo swainsoni) *in the Central Valley of California* (California Department of Fish and Game 1994) shall be implemented during construction. If confirmed nesting trees for Swainson's hawk are felled as a result of the project, the felled trees shall be replaced at a 3:1 ratio to be protected in perpetuity.

Page 3B-16

MM BIO-3a: Implement Valley Elderberry Longhorn Beetle Avoidance Measures

A qualified biologist shall conduct preconstruction surveys of the proposed recycled water conveyance system alignment to identify elderberry trees or bushes (*Sambucus* spp.) within 100 feet of proposed construction activities. If such activities are within 100 feet of elderberry trees or bushes, then the City shall consult with USFWS about appropriate avoidance, minimization, and mitigation measures to be implemented for the protection of valley elderberry longhorn beetle.

Page 3I-6

If landscaping within the right-of-way is disturbed, Caltrans requires replacement landscaping to meet current department standards. In addition, control measures must be implemented to prevent dust from entering the right-of-way. Although access to utility infrastructure located within freeway and expressway rights-of-way is normally permitted only from frontage roads, public roads and streets, trails, or auxiliary roads to avoid potential conflicts with traffic, safety measures provided as conditions to the permit would ensure that impacts on the circulation system would be less than significant. The City shall comply with all Caltrans requirements to obtain the necessary encroachment permit.

Additionally, the City would submit a road encroachment permit application for review and approval by the Tulare County Resource Management Agency Transportation Branch in order to obtain a road encroachment permit. The City would comply with all requirements of the Transportation Branch regarding road encroachment permits, including filling out an application that accurately describes the location and timeframe of construction that would temporarily affect County road right-of-ways by the placement of pipes for the recycled water conveyance system. As required by the road encroachment application, the City would also provide two sets of engineering plans that show the exact location of the proposed work, all County drain pipes, avenues, and footage of encroachment for each road and all existing utilities. The City would also comply with the County's insurance, bond, and indemnification requirements to obtain a road encroachment permit.

Page 8-1

California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. March. Available: <http://www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf>.

Changes and Clarifications to the Recirculated DEIR

Changes and clarifications to the text, tables, and figures of the recirculated DEIR were not necessary.

Attachment 1

California Department of Fish and Game 2012 Staff Report on Burrowing Owl Mitigation

Staff Report on Burrowing Owl Mitigation

State of California

Natural Resources Agency

Department of Fish and Game

March 7, 2012[1]

[1] This document replaces the Department of Fish and Game 1995 Staff Report On Burrowing Owl Mitigation.

TABLE OF CONTENTS

INTRODUCTION AND PURPOSE 1

DEPARTMENT ROLE AND LEGAL AUTHORITIES 2

GUIDING PRINCIPLES FOR CONSERVATION 3

CONSERVATION GOALS FOR THE BURROWING OWL IN CALIFORNIA 4

ACTIVITIES WITH THE POTENTIAL TO TAKE OR IMPACT BURROWING OWLS 4

PROJECT IMPACT EVALUATIONS 5

MITIGATION METHODS 8

ACKNOWLEDGEMENTS 15

REFERENCES 15

Appendix A. Burrowing Owl Natural History and Threats 20

Appendix B. Definitions 24

Appendix C. Habitat Assessment and Reporting Details 26

Appendix D. Breeding and Non-breeding Season Survey and Reports 28

Appendix E. Draft Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans 31

Appendix F. Mitigation Management Plan and Vegetation Management Goals 33

INTRODUCTION AND PURPOSE

Maintaining California's rich biological diversity is dependent on the conservation of species and their habitats. The California Department of Fish and Game (Department) has designated certain species as "species of special concern" when their population viability and survival is adversely affected by risk factors such as precipitous declines or other vulnerability factors (Shuford and Gardali 2008). Preliminary analyses of regional patterns for breeding populations of burrowing owls (*Athene cunicularia*) have detected declines both locally in their central and southern coastal breeding areas, and statewide where the species has experienced modest breeding range retraction (Gervais et al. 2008). In California, threat factors affecting burrowing owl populations include habitat loss, degradation and modification, and eradication of ground squirrels resulting in a loss of suitable burrows required by burrowing owls for nesting, protection from predators, and shelter (See Appendix A).

The Department recognized the need for a comprehensive conservation and mitigation strategy for burrowing owls, and in 1995 directed staff to prepare a report describing mitigation and survey recommendations. This report, "1995 Staff Report on Burrowing Owl Mitigation," (Staff Report) (CDFG 1995), contained Department-recommended burrowing owl and burrow survey techniques and mitigation measures intended to offset the loss of habitat and slow or reverse further decline of this species. Notwithstanding these measures, over the past 15+ years, burrowing owls have continued to decline in portions of their range (DeSante et al. 2007, Wilkerson and Siegel, 2010). The Department has determined that reversing declining population and range trends for burrowing owls will require implementation of more effective conservation actions, and evaluating the efficacy of the Department's existing recommended avoidance, minimization and mitigation approaches for burrowing owls.

The Department has identified three main actions that together will facilitate a more viable, coordinated, and concerted approach to conservation and mitigation for burrowing owls in California. These include:

1. Incorporating burrowing owl comprehensive conservation strategies into landscape-based planning efforts such as Natural Community Conservation Plans (NCCPs) and multi-species Habitat Conservation Plans (HCPs) that specifically address burrowing owls.
2. Developing and implementing a statewide conservation strategy (Burkett and Johnson, 2007) and local or regional conservation strategies for burrowing owls, including the development and implementation of a statewide burrowing owl survey and monitoring plan.
3. Developing more rigorous burrowing owl survey methods, working to improve the adequacy of impacts assessments; developing clear and effective avoidance and minimization measures; and developing mitigation measures to ensure impacts to the species are effectively addressed at the project, local, and/or regional level (the focus of this document).

This Report sets forth the Department's recommendations for implementing the third approach identified above by revising the 1995 Staff Report, drawing from the most relevant and current knowledge and expertise, and incorporating the best scientific information

available pertaining to the species. It is designed to provide a compilation of the best available science for Department staff, biologists, planners, land managers, California Environmental Quality Act (CEQA) lead agencies, and the public to consider when assessing impacts of projects or other activities on burrowing owls.

This revised Staff Report takes into account the California Burrowing Owl Consortium's Survey Protocol and Mitigation Guidelines (CBOC 1993, 1997) and supersedes the survey, avoidance, minimization and mitigation recommendations in the 1995 Staff Report. Based on experiences gained from implementing the 1995 Staff Report, the Department believes revising that report is warranted. This document also includes general conservation goals and principles for developing mitigation measures for burrowing owls.

DEPARTMENT ROLE AND LEGAL AUTHORITIES

The mission of the Department is to manage California's diverse fish, wildlife and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public. The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitats necessary to maintain biologically sustainable populations of those species (Fish and Game Code (FGC) §1802). The Department, as trustee agency pursuant to CEQA (See CEQA Guidelines, §15386), has jurisdiction by law over natural resources, including fish and wildlife, affected by a project, as that term is defined in Section 21065 of the Public Resources Code. The Department exercises this authority by reviewing and commenting on environmental documents and making recommendations to avoid, minimize, and mitigate potential negative impacts to those resources held in trust for the people of California.

Field surveys designed to detect the presence of a particular species, habitat element, or natural community are one of the tools that can assist biologists in determining whether a species or habitat may be significantly impacted by land use changes or disturbance. The Department reviews field survey data as well as site-specific and regional information to evaluate whether a project's impacts may be significant. This document compiles the best available science for conducting habitat assessments and surveys, and includes considerations for developing measures to avoid impacts or mitigate unavoidable impacts.

CEQA

CEQA requires public agencies in California to analyze and disclose potential environmental impacts associated with a project that the agency will carry out, fund, or approve. Any potentially significant impact must be mitigated to the extent feasible. Project-specific CEQA mitigation is important for burrowing owls because most populations exist on privately owned parcels that, when proposed for development or other types of modification, may be subject to the environmental review requirements of CEQA.

Take

Take of individual burrowing owls and their nests is defined by FGC section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in FGC Section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill."

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements various treaties and conventions between the United States and Canada, Japan, Mexico, and Russia for the protection of migratory birds, including the burrowing owl (50 C.F.R. § 10). The MBTA protects migratory bird nests from possession, sale, purchase, barter, transport, import and export, and collection. The other prohibitions of the MBTA - capture, pursue, hunt, and kill - are inapplicable to nests. The regulatory definition of take, as defined in Title 50 C.F.R. part 10.12, means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to hunt, shoot, wound, kill, trap, capture, or collect. Only the verb "collect" applies to nests. It is illegal to collect, possess, and by any means transfer possession of any migratory bird nest. The MBTA prohibits the destruction of a nest when it contains birds or eggs, and no possession shall occur during the destruction (see Fish and Wildlife Service, Migratory Bird Permit Memorandum, April 15, 2003). Certain exceptions to this prohibition are included in 50 C.F.R. section 21. Pursuant to Fish & Game Code section 3513, the Department enforces the Migratory Bird Treaty Act consistent with rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.

Regional Conservation Plans

Regional multiple species conservation plans offer long-term assurances for conservation of covered species at a landscape scale, in exchange for biologically appropriate levels of incidental take and/or habitat loss as defined in the approved plan. California's NCCP Act (FGC §2800 et seq.) governs such plans at the state level, and was designed to conserve species, natural communities, ecosystems, and ecological processes across a jurisdiction or a collection of jurisdictions. Complementary federal HCPs are governed by the Endangered Species Act (7 U.S.C. § 136, 16 U.S.C.§ 1531 et seq.) (ESA). Regional conservation plans (and certain other landscape-level conservation and management plans), may provide conservation for unlisted as well as listed species. Because the geographic scope of NCCPs and HCPs may span many hundreds of thousands of acres, these planning tools have the potential to play a significant role in conservation of burrowing owls, and grasslands and other habitats.

Fish and Game Commission Policies

There are a number of Fish and Game Commission policies (see FGC §2008) that can be applied to burrowing owl conservation. These include policies on: Raptors, Cooperation, Endangered and Threatened Species, Land Use Planning, Management and Utilization of Fish and Wildlife on Federal Lands, Management and Utilization of Fish and Wildlife on Private Lands, and Research.

GUIDING PRINCIPLES FOR CONSERVATION

Unless otherwise provided in a statewide, local, or regional conservation strategy, surveying and evaluating impacts to burrowing owls, as well as developing and implementing avoidance, minimization, and mitigation and conservation measures incorporate the following principles. These principles are a summary of Department staff expert opinion and were used to guide the preparation of this document.

1. Use the Precautionary Principle (Noss et al.1997), by which the alternative of increased conservation is deliberately chosen in order to buffer against incomplete knowledge of burrowing owl ecology and uncertainty about the consequences to burrowing owls of potential impacts, including those that are cumulative.
2. Employ basic conservation biology tenets and population-level approaches when determining what constitutes appropriate avoidance, minimization, and mitigation for impacts. Include mitigation effectiveness monitoring and reporting, and use an adaptive management loop to modify measures based on results.
3. Protect and conserve owls in wild, semi-natural, and agricultural habitats (conserve is defined at FGC §1802).
4. Protect and conserve natural nest burrows (or burrow surrogates) previously used by burrowing owls and sufficient foraging habitat and protect auxiliary "satellite" burrows that contribute to burrowing owl survivorship and natural behavior of owls.

CONSERVATION GOALS FOR THE BURROWING OWL IN CALIFORNIA

It is Department staff expert opinion that the following goals guide and contribute to the short and long-term conservation of burrowing owls in California:

1. Maintain size and distribution of extant burrowing owl populations (allowing for natural population fluctuations).
2. Increase geographic distribution of burrowing owls into formerly occupied historical range where burrowing owl habitat still exists, or where it can be created or enhanced, and where the reason for its local disappearance is no longer of concern.
3. Increase size of existing populations where possible and appropriate (for example, considering basic ecological principles such as carrying capacity, predator-prey relationships, and inter-specific relationships with other species at risk).
4. Protect and restore self-sustaining ecosystems or natural communities which can support burrowing owls at a landscape scale, and which will require minimal long-term management.
5. Minimize or prevent unnatural causes of burrowing owl population declines (e.g., nest burrow destruction, chemical control of rodent hosts and prey).
6. Augment/restore natural dynamics of burrowing owl populations including movement and genetic exchange among populations, such that the species does not require future listing and protection under the California Endangered Species Act (CESA) and/or the federal Endangered Species Act (ESA).
7. Engage stakeholders, including ranchers; farmers; military; tribes; local, state, and federal agencies; non-governmental organizations; and scientific research and education communities involved in burrowing owl protection and habitat management.

ACTIVITIES WITH THE POTENTIAL TO TAKE OR IMPACT BURROWING OWLS

The following activities are examples of activities that have the potential to take burrowing owls, their nests or eggs, or destroy or degrade burrowing owl habitat: grading, disking, cultivation, earthmoving, burrow blockage, heavy equipment compacting and crushing burrow tunnels, levee maintenance, flooding, burning and mowing (if burrows are impacted), and operating wind turbine collisions (collectively hereafter referred to as "projects" or "activities"

whether carried out pursuant to CEQA or not). In addition, the following activities may have impacts to burrowing owl populations: eradication of host burrowers; changes in vegetation management (i.e. grazing); use of pesticides and rodenticides; destruction, conversion or degradation of nesting, foraging, over-wintering or other habitats; destruction of natural burrows and burrow surrogates; and disturbance which may result in harassment of owls at occupied burrows.

PROJECT IMPACT EVALUATIONS

The following three progressive steps are effective in evaluating whether projects will result in impacts to burrowing owls. The information gained from these steps will inform any subsequent avoidance, minimization and mitigation measures. The steps for project impact evaluations are: 1) habitat assessment, 2) surveys, and 3) impact assessment. Habitat assessments are conducted to evaluate the likelihood that a site supports burrowing owl. Burrowing owl surveys provide information needed to determine the potential effects of proposed projects and activities on burrowing owls, and to avoid take in accordance with FGC sections 86, 3503, and 3503.5. Impact assessments evaluate the extent to which burrowing owls and their habitat may be impacted, directly or indirectly, on and within a reasonable distance of a proposed CEQA project activity or non-CEQA project. These three site evaluation steps are discussed in detail below.

Biologist Qualifications

The current scientific literature indicates that only individuals meeting the following minimum qualifications should perform burrowing owl habitat assessments, surveys, and impact assessments:

1. Familiarity with the species and its local ecology;
2. Experience conducting habitat assessments and non-breeding and breeding season surveys, or experience with these surveys conducted under the direction of an experienced surveyor;
3. Familiarity with the appropriate state and federal statutes related to burrowing owls, scientific research, and conservation;
4. Experience with analyzing impacts of development on burrowing owls and their habitat.

Habitat Assessment Data Collection and Reporting

A habitat assessment is the first step in the evaluation process and will assist investigators in determining whether or not occupancy surveys are needed. Refer to Appendix B for a definition of burrowing owl habitat. Compile the detailed information described in Appendix C when conducting project scoping, conducting a habitat assessment site visit and preparing a habitat assessment report.

Surveys

Burrowing owl surveys are the second step of the evaluation process and the best available scientific literature recommends that they be conducted whenever burrowing owl habitat or sign (see Appendix B) is encountered on or adjacent to (within 150 meters) a project site

(Thomsen 1971, Martin 1973). Occupancy of burrowing owl habitat is confirmed at a site when at least one burrowing owl, or its sign at or near a burrow entrance, is observed within the last three years (Rich 1984). Burrowing owls are more detectable during the breeding season with detection probabilities being highest during the nestling stage (Conway et al. 2008). In California, the burrowing owl breeding season extends from 1 February to 31 August (Haug et al. 1993, Thompsen 1971) with some variances by geographic location and climatic conditions. Several researchers suggest three or more survey visits during daylight hours (Haug and Diduik 1993, CBOC 1997, Conway and Simon 2003) and recommend each visit occur at least three weeks apart during the peak of the breeding season, commonly accepted in California as between 15 April and 15 July (CBOC 1997). Conway and Simon (2003) and Conway et al. (2008) recommended conducting surveys during the day when most burrowing owls in a local area are in the laying and incubation period (so as not to miss early breeding attempts), during the nesting period, and in the late nestling period when most owls are spending time above ground.

Non-breeding season (1 September to 31 January) surveys may provide information on burrowing owl occupancy, but do not substitute for breeding season surveys because results are typically inconclusive. Burrowing owls are more difficult to detect during the non-breeding season and their seasonal residency status is difficult to ascertain. Burrowing owls detected during non-breeding season surveys may be year-round residents, young from the previous breeding season, pre-breeding territorial adults, winter residents, dispersing juveniles, migrants, transients or new colonizers. In addition, the numbers of owls and their pattern of distribution may differ during winter and breeding seasons. However, on rare occasions, non-breeding season surveys may be warranted (i.e., if the site is believed to be a wintering site only based on negative breeding season results). Refer to Appendix D for information on breeding season and non-breeding season survey methodologies.

Survey Reports

Adequate information about burrowing owls present in and adjacent to an area that will be disturbed by a project or activity will enable the Department, reviewing agencies and the public to effectively assess potential impacts and will guide the development of avoidance, minimization, and mitigation measures. The survey report includes but is not limited to a description of the proposed project or proposed activity, including the proposed project start and end dates, as well as a description of disturbances or other activities occurring on-site or nearby. Refer to Appendix D for details included in a survey report.

Impact Assessment

The third step in the evaluation process is the impact assessment. When surveys confirm occupied burrowing owl habitat in or adjoining the project area, there are a number of ways to assess a project's potential significant impacts to burrowing owls and their habitat. Richardson and Miller (1997) recommended monitoring raptor behavior prior to developing management recommendations and buffers to determine the extent to which individuals have been sensitized to human disturbance. Monitoring results will also provide detail necessary for developing site-specific measures. Postovit and Postovit (1987) recommended an analytical approach to mitigation planning: define the problem (impact), set goals (to guide mitigation development), evaluate and select mitigation methods, and monitor the results.

Define the problem. The impact assessment evaluates all factors that could affect burrowing owls. Postovit and Postovit (1987) recommend evaluating the following in assessing impacts to raptors and planning mitigation: type and extent of disturbance, duration and timing of disturbance, visibility of disturbance, sensitivity and ability to habituate, and influence of environmental factors. They suggest identifying and addressing all potential direct and indirect impacts to burrowing owls, regardless of whether or not the impacts will occur during the breeding season. Several examples are given for each impact category below; however, examples are not intended to be used exclusively.

Type and extent of the disturbance. The impact assessment describes the nature (source) and extent (scale) of potential project impacts on occupied, satellite and unoccupied burrows including acreage to be lost (temporary or permanent), fragmentation/edge being created, increased distance to other nesting and foraging habitat, and habitat degradation. Discuss any project activities that impact either breeding and/or non-breeding habitat which could affect owl home range size and spatial configuration, negatively affect onsite and offsite burrowing owl presence, increase energetic costs, lower reproductive success, increase vulnerability to predation, and/or decrease the chance of procuring a mate.

Duration and timing of the impact. The impact assessment describes the amount of time the burrowing owl habitat will be unavailable to burrowing owls (temporary or permanent) on the site and the effect of that loss on essential behaviors or life history requirements of burrowing owls, the overlap of project activities with breeding and/or non-breeding seasons (timing of nesting and/or non-breeding activities may vary with latitude and climatic conditions, which should be considered with the timeline of the project or activity), and any variance of the project activities in intensity, scale and proximity relative to burrowing owl occurrences.

Visibility and sensitivity. Some individual burrowing owls or pairs are more sensitive than others to specific stimuli and may habituate to ongoing visual or audible disturbance. Site-specific monitoring may provide clues to the burrowing owl's sensitivities. This type of assessment addresses the sensitivity of burrowing owls within their nesting area to humans on foot, and vehicular traffic. Other variables are whether the site is primarily in a rural versus urban setting, and whether any prior disturbance (e.g., human development or recreation) is known at the site.

Environmental factors. The impact assessment discusses any environmental factors that could be influenced or changed by the proposed activities including nest site availability, predators, prey availability, burrowing mammal presence and abundance, and threats from other extrinsic factors such as human disturbance, urban interface, feral animals, invasive species, disease or pesticides.

Significance of impacts. The impact assessment evaluates the potential loss of nesting burrows, satellite burrows, foraging habitat, dispersal and migration habitat, wintering habitat, and habitat linkages, including habitat supporting prey and host burrowers and other essential habitat attributes. This assessment determines if impacts to the species will result in significant impacts to the species locally, regionally and range-wide per CEQA Guidelines §15382 and Appendix G. The significance of the impact to habitat depends on the extent of habitat disturbed and length of time the habitat is unavailable (for example: minor – several days, medium – several weeks to months, high - breeding season affecting juvenile survival,

or over winter affecting adult survival).

Cumulative effects. The cumulative effects assessment evaluates two consequences: 1) the project's proportional share of reasonably foreseeable impacts on burrowing owls and habitat caused by the project or in combination with other projects and local influences having impacts on burrowing owls and habitat, and 2) the effects on the regional owl population resulting from the project's impacts to burrowing owls and habitat.

Mitigation goals. Establishing goals will assist in planning mitigation and selecting measures that function at a desired level. Goals also provide a standard by which to measure mitigation success. Unless specifically provided for through other FGC Sections or through specific regulations, take, possession or destruction of individual burrowing owls, their nests and eggs is prohibited under FGC sections 3503, 3503.5 and 3513. Therefore, a required goal for all project activities is to avoid take of burrowing owls. Under CEQA, goals would consist of measures that would avoid, minimize and mitigate impacts to a less than significant level. For individual projects, mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). In order for mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will improve environmental conditions. As set forth in more detail in Appendix A, the current scientific literature supports the conclusion that mitigation for permanent habitat loss necessitates replacement with an equivalent or greater habitat area for breeding, foraging, wintering, dispersal, presence of burrows, burrow surrogates, presence of fossorial mammal dens, well drained soils, and abundant and available prey within close proximity to the burrow.

MITIGATION METHODS

The current scientific literature indicates that any site-specific avoidance or mitigation measures developed should incorporate the best practices presented below or other practices confirmed by experts and the Department. The Department is available to assist in the development of site-specific avoidance and mitigation measures.

Avoiding. A primary goal is to design and implement projects to seasonally and spatially avoid negative impacts and disturbances that could result in take of burrowing owls, nests, or eggs. Other avoidance measures may include but not be limited to:

- Avoid disturbing occupied burrows during the nesting period, from 1 February through 31 August.
- Avoid impacting burrows occupied during the non-breeding season by migratory or non-migratory resident burrowing owls.
- Avoid direct destruction of burrows through chaining (dragging a heavy chain over an area to remove shrubs), disking, cultivation, and urban, industrial, or agricultural development.
- Develop and implement a worker awareness program to increase the on-site worker's recognition of and commitment to burrowing owl protection.
- Place visible markers near burrows to ensure that farm equipment and other machinery does not collapse burrows.
- Do not fumigate, use treated bait or other means of poisoning nuisance animals in areas where burrowing owls are known or suspected to occur (e.g., sites observed with nesting

owls, designated use areas).
- Restrict the use of treated grain to poison mammals to the months of January and February.

Take avoidance (pre-construction) surveys. Take avoidance surveys are intended to detect the presence of burrowing owls on a project site at a fixed period in time and inform necessary take avoidance actions. Take avoidance surveys may detect changes in owl presence such as colonizing owls that have recently moved onto the site, migrating owls, resident burrowing owls changing burrow use, or young of the year that are still present and have not dispersed. Refer to Appendix D for take avoidance survey methodology.

Site surveillance. Burrowing owls may attempt to colonize or re-colonize an area that will be impacted; thus, the current scientific literature indicates a need for ongoing surveillance at the project site during project activities is recommended. The surveillance frequency/effort should be sufficient to detect burrowing owls if they return. Subsequent to their new occupancy or return to the site, take avoidance measures should assure with a high degree of certainty that take of owls will not occur.

Minimizing. If burrowing owls and their habitat can be protected in place on or adjacent to a project site, the use of buffer zones, visual screens or other measures while project activities are occurring can minimize disturbance impacts. Conduct site-specific monitoring to inform development of buffers (see Visibility and sensitivity above). The following general guidelines for implementing buffers should be adjusted to address site-specific conditions using the impact assessment approach described above. The CEQA lead agency and/or project proponent is encouraged to consult with the Department and other burrowing owl experts for assistance in developing site-specific buffer zones and visual screens.

Buffers. Holroyd et al. (2001) identified a need to standardize management and disturbance mitigation guidelines. For instance, guidelines for mitigating impacts by petroleum industries on burrowing owls and other prairie species (Scobie and Faminow, 2000) may be used as a template for future mitigation guidelines (Holroyd et al. 2001). Scobie and Faminow (2000) developed guidelines for activities around occupied burrowing owl nests recommending buffers around low, medium, and high disturbance activities, respectively (see below).

Recommended restricted activity dates and setback distances by level of disturbance for burrowing owls (Scobie and Faminow 2000).

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

* meters (m)

Based on existing vegetation, human development, and land uses in an area, resource managers may decide to allow human development or resource extraction closer to these area/sites than recommended above. However, if it is decided to allow activities closer than

the setback distances recommended, a broad-scale, long-term, scientifically-rigorous monitoring program ensures that burrowing owls are not detrimentally affected by alternative approaches.

Other minimization measures include eliminating actions that reduce burrowing owl forage and burrowing surrogates (e.g. ground squirrel), or introduce/facilitate burrowing owl predators. Actions that could influence these factors include reducing livestock grazing rates and/or changing the timing or duration of grazing or vegetation management that could result in less suitable habitat.

Burrow exclusion and closure. Burrow exclusion is a technique of installing one-way doors in burrow openings during the non-breeding season to temporarily exclude burrowing owls, or permanently exclude burrowing owls and close burrows after verifying burrows are empty by site monitoring and scoping. Exclusion in and of itself is not a take avoidance, minimization or mitigation method. Eviction of burrowing owls is a potentially significant impact under CEQA.

The long-term demographic consequences of these techniques have not been thoroughly evaluated, and the fate of evicted or excluded burrowing owls has not been systematically studied. Because burrowing owls are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, and satellite burrows may lead to indirect impacts or take. Temporary or permanent closure of burrows may result in significant loss of burrows and habitat for reproduction and other life history requirements. Depending on the proximity and availability of alternate habitat, loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and compete for available burrows. Therefore, exclusion and burrow closure are not recommended where they can be avoided. The current scientific literature indicates consideration of all possible avoidance and minimization measures before temporary or permanent exclusion and closure of burrows is implemented, in order to avoid take.

The results of a study by Trulio (1995) in California showed that burrowing owls passively displaced from their burrows were quickly attracted to adjacent artificial burrows at five of six passive relocation sites. The successful sites were all within 75 meters (m) of the destroyed burrow, a distance generally within a pair's territory. This researcher discouraged using passive relocation to artificial burrows as a mitigation measure for lost burrows without protection of adjacent foraging habitat. The study results indicated artificial burrows were used by evicted burrowing owls when they were approximately 50-100 m from the natural burrow (Thomsen 1971, Haug and Oliphant 1990). Locating artificial or natural burrows more than 100 m from the eviction burrow may greatly reduce the chances that new burrows will be used. Ideally, exclusion and burrow closure is employed only where there are adjacent natural burrows and non-impacted, sufficient habitat for burrowing owls to occupy with permanent protection mechanisms in place. Any new burrowing owl colonizing the project site after the CEQA document has been adopted may constitute changed circumstances that should be addressed in a re-circulated CEQA document.

The current scientific literature indicates that burrow exclusion should only be conducted by qualified biologists (meeting the Biologist's Qualifications above) during the non-breeding

season, before breeding behavior is exhibited and after the burrow is confirmed empty by site surveillance and/or scoping. The literature also indicates that when temporary or permanent burrow exclusion and/or burrow closure is implemented, burrowing owls should not be excluded from burrows unless or until:

- A Burrowing Owl Exclusion Plan (see Appendix E) is developed and approved by the applicable local DFG office;
- Permanent loss of occupied burrow(s) and habitat is mitigated in accordance with the Mitigating Impacts sections below. Temporary exclusion is mitigated in accordance with the item #1 under Mitigating Impacts below.
- Site monitoring is conducted prior to, during, and after exclusion of burrowing owls from their burrows sufficient to ensure take is avoided. Conduct daily monitoring for one week to confirm young of the year have fledged if the exclusion will occur immediately after the end of the breeding season.
- Excluded burrowing owls are documented using artificial or natural burrows on an adjoining mitigation site (if able to confirm by band re-sight).

Translocation (Active relocation offsite >100 meters). At this time, there is little published information regarding the efficacy of translocating burrowing owls, and additional research is needed to determine subsequent survival and breeding success (Klute et al. 2003, Holroyd et al. 2001). Study results for translocation in Florida implied that hatching success may be decreased for populations of burrowing owls that undergo translocation (Nixon 2006). At this time, the Department is unable to authorize the capture and relocation of burrowing owls except within the context of scientific research (FGC §1002) or a NCCP conservation strategy.

Mitigating impacts. Habitat loss and degradation from rapid urbanization of farmland in the core areas of the Central and Imperial valleys is the greatest of many threats to burrowing owls in California (Shuford and Gardali, 2008). At a minimum, if burrowing owls have been documented to occupy burrows (see Definitions, Appendix B) at the project site in recent years, the current scientific literature supports the conclusion that the site should be considered occupied and mitigation should be required by the CEQA lead agency to address project-specific significant and cumulative impacts. Other site-specific and regionally significant and cumulative impacts may warrant mitigation. The current scientific literature indicates the following to be best practices. If these best practices cannot be implemented, the lead agency or lead investigator may consult with the Department to develop effective mitigation alternatives. The Department is also available to assist in the identification of suitable mitigation lands.

1. Where habitat will be temporarily disturbed, restore the disturbed area to pre-project condition including decompacting soil and revegetating. Permanent habitat protection may be warranted if there is the potential that the temporary impacts may render a nesting site (nesting burrow and satellite burrows) unsustainable or unavailable depending on the time frame, resulting in reduced survival or abandonment. For the latter potential impact, see the permanent impact measures below.
2. Mitigate for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the information provided in Appendix A. Note: A

minimum habitat replacement recommendation is not provided here as it has been shown to serve as a default, replacing any site-specific analysis and discounting the wide variation in natal area, home range, foraging area, and other factors influencing burrowing owls and burrowing owl population persistence in a particular area.

3. Mitigate for permanent impacts to nesting, occupied and satellite burrows and burrowing owl habitat with (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. If the mitigation lands are located adjacent to the impacted burrow site, ensure the nearest neighbor artificial or natural burrow clusters are at least within 210 meters (Fisher et al. 2007).
4. Permanently protect mitigation land through a conservation easement deeded to a non-profit conservation organization or public agency with a conservation mission, for the purpose of conserving burrowing owl habitat and prohibiting activities incompatible with burrowing owl use. If the project is located within the service area of a Department-approved burrowing owl conservation bank, the project proponent may purchase available burrowing owl conservation bank credits.
5. Develop and implement a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls (see Management Plan and Artificial Burrow sections below, if applicable).
6. Fund the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment.
7. Habitat should not be altered or destroyed, and burrowing owls should not be excluded from burrows, until mitigation lands have been legally secured, are managed for the benefit of burrowing owls according to Department-approved management, monitoring and reporting plans, and the endowment or other long-term funding mechanism is in place or security is provided until these measures are completed.
8. Mitigation lands should be on, adjacent or proximate to the impact site where possible and where habitat is sufficient to support burrowing owls present.
9. Where there is insufficient habitat on, adjacent to, or near project sites where burrowing owls will be excluded, acquire mitigation lands with burrowing owl habitat away from the project site. The selection of mitigation lands should then focus on consolidating and enlarging conservation areas located outside of urban and planned growth areas, within foraging distance of other conserved lands. If mitigation lands are not available adjacent to other conserved lands, increase the mitigation land acreage requirement to ensure a selected site is of sufficient size. Offsite mitigation may not adequately offset the biological and habitat values impacted on a one to one basis. Consult with the Department when determining offsite mitigation acreages.
10. Evaluate and select suitable mitigation lands based on a comparison of the habitat attributes of the impacted and conserved lands, including but not limited to: type and structure of habitat being impacted or conserved; density of burrowing owls in impacted and conserved habitat; and significance of impacted or conserved habitat to the species range-wide. Mitigate for the highest quality burrowing owl habitat impacted first and foremost when identifying mitigation lands, even if a mitigation site is located outside of

a lead agency's jurisdictional boundary, particularly if the lead agency is a city or special district.

11. Select mitigation lands taking into account the potential human and wildlife conflicts or incompatibility, including but not limited to, human foot and vehicle traffic, and predation by cats, loose dogs and urban-adapted wildlife, and incompatible species management (i.e., snowy plover).
12. Where a burrowing owl population appears to be highly adapted to heavily altered habitats such as golf courses, airports, athletic fields, and business complexes, permanently protecting the land, augmenting the site with artificial burrows, and enhancing and maintaining those areas may enhance sustainability of the burrowing owl population onsite. Maintenance includes keeping lands grazed or mowed with weed-eaters or push mowers, free from trees and shrubs, and preventing excessive human and human-related disturbance (e.g., walking, jogging, off-road activity, dog-walking) and loose and feral pets (chasing and, presumably, preying upon owls) that make the environment uninhabitable for burrowing owls (Wesemann and Rowe 1985, Millsap and Bear 2000, Lincer and Bloom 2007). Items 4, 5 and 6 also still apply to this mitigation approach.
13. If there are no other feasible mitigation options available and a lead agency is willing to establish and oversee a Burrowing Owl Mitigation and Conservation Fund that funds on a competitive basis acquisition and permanent habitat conservation, the project proponent may participate in the lead agency's program.

Artificial burrows. Artificial burrows have been used to replace natural burrows either temporarily or long-term and their long-term success is unclear. Artificial burrows may be an effective addition to in-perpetuity habitat mitigation if they are augmenting natural burrows, the burrows are regularly maintained (i.e., no less than annual, with biennial maintenance recommended), and surrounding habitat patches are carefully maintained. There may be some circumstances, for example at airports, where squirrels will not be allowed to persist and create a dynamic burrow system, where artificial burrows may provide some support to an owl population.

Many variables may contribute to the successful use of artificial burrows by burrowing owls, including pre-existence of burrowing owls in the area, availability of food, predators, surrounding vegetation and proximity, number of natural burrows in proximity, type of materials used to build the burrow, size of the burrow and entrance, direction in which the burrow entrance is facing, slope of the entrance, number of burrow entrances per burrow, depth of the burrow, type and height of perches, and annual maintenance needs (Belthoff and King 2002, Smith et al. 2005, Barclay et al. 2011). Refer to Barclay (2008) and (2011) and to Johnson et al. 2010 (unpublished report) for guidance on installing artificial burrows including recommendations for placement, installation and maintenance.

Any long-term reliance on artificial burrows as natural burrow replacements must include semi-annual to annual cleaning and maintenance and/or replacement (Barclay et al. 2011, Smith and Conway 2005, Alexander et al. 2005) as an ongoing management practice. Alexander et al. (2005), in a study of the use of artificial burrows found that all of 20 artificial burrows needed some annual cleaning and maintenance. Burrows were either excavated by predators, blocked by soil or vegetation, or experienced substrate erosion forming a space beneath the tubing that prevented nestlings from re-entering the burrow.

Mitigation lands management plan. Develop a Mitigation Lands Management Plan for projects that require off-site or on-site mitigation habitat protection to ensure compliance with and effectiveness of identified management actions for the mitigation lands. A suggested outline and related vegetation management goals and monitoring success criteria can be found in Appendix E.

Mitigation Monitoring and Reporting

Verify the compliance with required mitigation measures, the accuracy of predictions, and ensure the effectiveness of all mitigation measures for burrowing owls by conducting follow-up monitoring, and implementing midcourse corrections, if necessary, to protect burrowing owls. Refer to CEQA Guidelines Section 15097 and the CEQA Guidelines for additional guidance on mitigation, monitoring and reporting. Monitoring is qualitatively different from site surveillance; monitoring normally has a specific purpose and its outputs and outcomes will usually allow a comparison with some baseline condition of the site before the mitigation (including avoidance and minimization) was undertaken. Ideally, monitoring should be based on the Before-After Control-Impact (BACI) principle (McDonald et al. 2000) that requires knowledge of the pre-mitigation state to provide a reference point for the state and change in state after the project and mitigation have been implemented.

ACKNOWLEDGEMENTS

We thank Jack Barclay, Jeff Lincer, David Plumpton, Jeff Kidd, Carol Roberts and other reviewers for their valuable comments on this report. We also want to acknowledge all the hard work of the Department team, especially T. Bartlett, K. Riesz, S. Wilson, D. Gifford, D. Mayer, J. Gan, L. Connolly, D. Mayer, A. Donlan, L. Bauer, L. Comrack, D. Lancaster, E. Burkett, B. Johnson, D. Johnston, A. Gonzales, S. Morey and K. Hunting.

REFERENCES

Alexander, A. K., M. R. Sackschewsky, and C. A. Duberstein. 2005. Use of artificial burrows by burrowing owls (athene cunicularia) at the HAMMER Facility on the U.S. Department of Energy Hanford Site. Pacific Northwest National Lab-15414. U.S. Department of Energy, DE-AC05-76RL01830, Richland, Washington, USA.

BIOS. California Department of Fish and Game. The Biogeographic Information Observation System (http://bios.dfg.ca.gov/)

Barclay, J. H. 2008. A simple artificial burrow design for burrowing owls. Journal of Raptor Research. 42: 53-57.

Barclay, J. H. 2012. Albion Environmental, Inc, personal communication.

Barclay, J. H., K. W. Hunting, J. L. Lincer, J. Linthicum, and T. A. Roberts, editors. 2007. Proceedings of the California Burrowing Owl Symposium, 11-12 November 2003, Sacramento, California, USA. Bird Populations Monographs No. 1. The Institute for Bird Populations and Albion Environmental, Inc., Point Reyes Station, CA.

Barclay, J. H., N. Korfanta, and M. Kauffman. 2011. Long-term population dynamics of a managed burrowing owl colony. Journal of Wildlife Management 75: 1295–1306.

Belthoff, J R., R. A. King. 2002. Nest-site characteristics of burrowing owls (athene cunicularia) in the Snake River Birds of Prey National Conservation Area, Idaho, and applications to artificial burrow installation. Western North American Naturalist 62: 112-119.

Botelho, E. S. 1996. Behavioral ecology and parental care of breeding western burrowing owls (Speotyto cunicularia hupugaea) in southern New Mexico, USA. Dissertation, New Mexico State University, Las Cruces, New Mexico, USA.

Burkett, E. E., and B. S. Johnson. 2007. Development of a conservation strategy for burrowing owls in California. Pages 165-168 *in* J. H. Barclay, K. W. Hunting, J. L. Lincer, J. Linthicum, and T. A. Roberts, editors. Proceedings of the California Burrowing Owl Symposium, 11-12 November 2003, Sacramento, California, USA. Bird Populations Monographs No. 1. The Institute for Bird Populations and Albion Environmental, Inc., Point Reyes Station, CA.

CBOC (California Burrowing Owl Consortium). 1997. Burrowing owl survey protocol and mitigation guidelines. Pages 171-177 *in* Lincer, J. L. and K. Steenhof (editors). 1997. The burrowing owl, its biology and management. Raptor Research Report Number 9.

CDFG (California Department of Fish and Game). 1995. Staff report on burrowing owl mitigation. Unpublished report. Sacramento, California, USA.

CNDDB. California Department of Fish and Game. The California Natural Diversity Database (CNDDB) (http://www.dfg.ca.gov/biogeodata/cnddb/), Sacramento, California, USA.

Catlin, D. H. 2004. Factors affecting within-season and between-season breeding dispersal of Burrowing Owls in California. Thesis, Oregon State University, Corvallis, Oregon, USA

Catlin, D. H., and D. K. Rosenberg. 2006. Nest destruction increases mortality and dispersal of Burrowing Owls in the Imperial Valley, California. Southwest Naturalist 51: 406–409.

Catlin, D. H., D. K. Rosenberg, and K. L. Haley. 2005. The effects of nesting success and mate fidelity on breeding dispersal in burrowing owls. Canadian Journal of Zoology 83:1574–1580.

Conway, C. J., and J. Simon. 2003. Comparison of detection probability associated with burrowing owl survey methods. Journal of Wildlife Management 67: 501-511.

Conway, C. J., V. Garcia, M. D., and K. Hughes. 2008. Factors affecting detection of burrowing owl nests during standardized surveys. Journal of Wildlife Management 72: 688-696.

Coulombe, H. N. 1971. Behavior and population ecology of the burrowing owl, Speotyto cunicularia, in the Imperial Valley of California. Condor 73: 162–176.

Dechant, J. A., M. L. Sondreal, D. H. Johnson, L. D. Igl, C. M. Goldade, P. A. Rabie, and B. R. Euliss. 2003. Effects of management practices on grassland birds: burrowing owl. Northern Prairie Wildlife Research Center, Jamestown, North Dakota. Northern Prairie Wildlife Research Center Online. <http://www.npwrc.usgs.gov/resource/literatr/grasbird/buow/buow.htm>.

DeSante, D. F., E. D Ruhlen, and R. Scalf. 2007. The distribution and relative abundance of burrowing owls in California during 1991–1993: Evidence for a declining population and thoughts on its conservation. Pages 1-41 *in* J. H. Barclay, K. W. Hunting, J. L. Lincer, J. Linthicum, and T. A. Roberts, editors. Proceedings of the California Burrowing Owl Symposium, 11-12 November 2003 Sacramento, California, USA. Bird Populations Monographs No. 1. The Institute for Bird Populations and Albion Environmental, Inc., Point Reyes Station, CA.

Desmond, M. J., and J. A. Savidge. 1998. Burrowing Owl conservation in the Great Plains. Proceedings of the Second International Burrowing Owl Symposium, 29-30 September 1999, Ogden, Utah, USA.

Desmond, M. J., and J. A. Savidge. 1999. Satellite burrow use by burrowing owl chicks and its influence on nest fate. Pages 128-130 *in* P. D. Vickery and J. R. Herkert, editors. Ecology and conservation of grassland birds of the western hemisphere. Studies in Avian Biology 19.

Emlen, J. T. 1977. Estimating breeding season bird densities from transects counts. Auk 94: 455-468.

Fisher, J. B., L. A. Trulio, G. S. Biging, and D. Chromczack. 2007. An analysis of spatial clustering and implications for wildlife management: a burrowing owl example. Environmental Management 39: 403-11.

Gervais, J. A., D. K. Rosenberg, and L. A. Comrack. Burrowing Owl (Athene cunicularia) *in* Shuford, W.D. and T. Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento, California, USA.

Gervais, J. A., D. K. Rosenberg, R. G. Anthony. 2003. Space use and pesticide exposure risk of male burrowing owls in an agricultural landscape. Journal of Wildlife Management 67: 155-164.

Green, G.A.; Anthony, R.G. 1989. Nesting success and habitat relationships of burrowing owls in the Columbia Basin, Oregon. The Condor 91: 347-354.

Haug, E. A. 1985. Observations on the breeding ecology of burrowing owls in Saskatchewan.

Thesis, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.
Haug, E. A., B. A. Millsap, and M. S. Martell. 1993. Burrowing owl (Speotyto cunicularia), *in* A. Poole and F. Gill, editors, The Birds of North America, The Academy of Natural Sciences, Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C., USA.
Haug, E. A., and L. W. Oliphant. 1990. Movements, activity patterns, and habitat use of burrowing owls in Saskatchewan. Journal of Wildlife Management 54: 27-35.
Holroyd, G. L., R. Rodriguez-Estrella, and S. R. Sheffield. 2001. Conservation of the burrowing owl in western North America: issues, challenges, and recommendations. Journal of Raptor Research 35: 399-407.
James, P. C., T. J. Ethier, and M. K. Toutloff. 1997. Parameters of a declining burrowing owl population in Saskatchewan. Pages 34-37. *in* J. L. Lincer, and K. Steenhof, editors. The burrowing owl, its biology and management: including the proceedings of the first international symposium. 13-14 November 1992, Bellevue, WA, USA. Raptor Research Report Number 9.
Johnson, D. H., D. C. Gillis, M. A. Gregg, J. L.Rebholz, J. L. Lincer, and J. R. Belthoff. 2010. Users guide to installation of artificial burrows for burrowing owls. Unpublished report. Tree Top Inc., Selah, Washington, USA.
Klute, D. S., A. W. Ayers, M. T. Green, W. H. Howe, S. L Jones, J. A. Shaffer, S. R. Sheffield, and T. S. Zimmerman. 2003. Status assessment and conservation plan for the western burrowing owl in the United States. U.S. Department of the Interior, Fish and Wildlife Service, Biological Technical Publication FWS/BTP-R6001-2003, Washington, D.C, USA.
Koenig, W. D., D. D. Van Vuren, and P. N. Hooge. 1996. Detectability, philopatry, and the distribution of dispersal distances in vertebrates. Trends in Ecology and Evolution 11: 514–517.
LaFever, D. H., K. E. LaFever, D. H. Catlin, and D. K. Rosenberg. 2008. Diurnal time budget of burrowing owls in a resident population during the non-breeding season. Southwestern Naturalist 53: 29-33.
Lincer, J. L., and P. W. Bloom. 2007. The status of the burrowing owl (Athene cunicularia) in San Diego County, CA. Pages 90-102 *in* Proceedings of the California Burrowing Owl Symposium, 11-12 November 2003, Sacramento, California, USA. Bird Populations Monographs No. 1. The Institute for Bird Populations and Albion Environmental, Inc., Point Reyes Station, CA.
Lutz, R. S. and D. L. Plumpton. 1999. Philopatry and nest site reuse by burrowing owls: implications for management. Journal of Raptor Research 33: 149-153.
MacCracken, J. G., D. W. Uresk, and R. M. Hansen. 1985a. Vegetation and soils of burrowing owl nest sites in Conata Basin, South Dakota. Condor 87: 152-154.
Manning, J. A., and R. S. A. Kaler. 2011. Effects of survey methods on burrowing owl behaviors. Journal of Wildlife Management 75: 525-30.
McDonald, T. L., W. P. Erickson, and L. L. McDonald. 2000. Analysis of count data from before-after control-impact studies. Journal of Agricultural, Biological and Environmental Statistics 5: 262-279.
Millsap, B. A., and C. Bear. 2000. Density and reproduction of burrowing owls along an urban development gradient. Journal of Wildlife Management 64:33-41.
Nixon, P A. 2006. Effects of translocation on the Florida burrowing owl (Athene cunicularia floridana). Thesis. University of South Florida, Tampa, Florida, USA.
Noss, R. F., M. A. O'Connell, and D. D. Murphy. 1997. The science of conservation planning:

habitat conservation under the Endangered Species Act. Island Press, Washington D.C., USA.
Postovit, H. R., and B. C. Postovit. 1987. Impacts and mitigation techniques. Pages 183-213 in Raptor management techniques manual scientific technical series number 10, National Wildlife Federation, Washington, D. C., USA
Remsen, J. V., Jr. 1978. Bird species of special concern in California: An annotated list of declining or vulnerable bird species. California Department of Fish and Game, Nongame Wildlife. Investigations, Wildlife Management Branch Administrative Report 78-1, Sacramento, California, USA.
Rich, T. 1984. Monitoring burrowing owl populations: implications of burrow re-use. Wildlife Society Bulletin 12: 178-189.
Richardson, C. T. and C. K. Miller. 1997. Recommendations for protecting raptors from human disturbance: a review. Wildlife Society Bulletin 25: 634-38.
Ronan, N. A. 2002. Habitat selection, reproductive success, and site fidelity of burrowing owls in a grassland ecosystem. Thesis, Oregon State University, Corvallis, Oregon, USA.
Rosenberg, D., 2009 Oregon State University, Corvallis, personal communication.
Rosenberg, D. K., J. A. Gervais, D. F. DeSante, and H. Ober. 2009. An updated adaptive management plan for the burrowing owl population at NAS Lemoore. The Oregon Wildlife Institute, Corvallis, OR and The Institute for Bird Populations, Point Reyes Station, CA. OWI Contribution No. 201 and IBP Contribution No. 375.
Rosenberg, D. K., J. A. Gervais, H. Ober, and D. F. DeSante. 1998. An adaptive management plan for the burrowing owl population at Naval Air Station Lemoore, California, USA. Publication 95, Institute for Bird Populations, P.O. Box 1346, Pt. Reyes Station, CA 94956.
Rosenberg, D. K., and K. L. Haley. 2004. The ecology of burrowing owls in the agroecosystem of the Imperial Valley, California. Studies in Avian Biology 27:120-135.
Rosenberg, D. K., L. A. Trulio, D. H. Catlin, D. Chromczack, J. A. Gervais, N. Ronan, and K. A. Haley. 2007. The ecology of the burrowing owl in California, unpublished report to Bureau of Land Management.
Rosier, J. R., N. A., Ronan, and D. K. Rosenberg. 2006. Post-breeding dispersal of burrowing owls in an extensive California grassland. American Midland Naturalist 155: 162–167.
Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California vegetation, Second edition. California Native Plant Society, Sacramento, California, USA.
Scobie, D., and C. Faminow. 2000. Development of standardized guidelines for petroleum industry activities that affect COSEWIC Prairie and Northern Region vertebrate species at risk. Environment Canada, Prairie and Northern Region, Edmonton, Alberta, Canada.
Shuford, W. D. and T. Gardali, editors. 2008. California Bird Species of Special Concern: a ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento. Gervais, J. A., D. K. Rosenberg, and L. Comrack. 2008. Burrowing Owl (Athene cunicularia).
Smith, M. D., C. J. Conway, and L. A. Ellis. 2005. Burrowing owl nesting productivity: a comparison between artificial and natural burrows on and off golf courses. Wildlife Society Bulletin 33: 454-462.
Thelander, C. G., K. S. Smallwood, and L. Rugge. 2003. Bird risk behaviors and fatalities at the Altamont Pass Wind Resource Area, period of performance: March 1998–

December 2000. U.S. Department of Energy, National Renewable Energy Laboratory, Golden, Colorado, USA.
Thomsen, L. 1971. Behavior and ecology of burrowing owls on the Oakland Municipal Airport. Condor 73: 177-192.
Thompson, C. D. 1984. Selected aspects of burrowing owl ecology in central Wyoming. Thesis, University of Wyoming, Laramie, Wyoming, USA.
Trulio, L. 1995. Passive relocation: A method to preserve burrowing owls on disturbed sites. Journal of Field Ornithology 66: 99–106.
U.S. Fish and Wildlife Service (USFWS). 2002. Birds of conservation concern 2002. U.S. Department of Interior, Division of Migratory Bird Management, Arlington, Virginia, USA.
U.S. Fish and Wildlife Service (USFWS). 2008. Birds of Conservation Concern 2008. U.S. Department of Interior, Division of Migratory Bird Management, Arlington, Virginia, USA.
Wesemann, T. and M. Rowe. 1985. Factors influencing the distribution and abundance of burrowing owls in Cape Coral, Florida. Pages 129-137 *in* L. W. Adams and D. L. Leedy, editors. Integrating Man and Nature in the Metropolitan Environment. Proceedings National Symposium. on Urban Wildlife, 4-7 November 1986, Chevy Chase, Maryland, USA.
Wilkerson, R. L. and R. B. Siegel. 2010. Assessing changes in the distribution and abundance of burrowing owls in California, 1993-2007. Bird Populations 10: 1-36.
Zarn, M. 1974. Burrowing owl. U.S. Department of the Interior, Bureau of Land Management. Technical Note T-N-250, Denver, Colorado, USA.

Appendix A. Burrowing Owl Natural History and Threats

Diet

Burrowing owl diet includes arthropods, small rodents, birds, amphibians, reptiles, and carrion (Haug et al. 1993).

Breeding

In California, the breeding season for the burrowing owl typically occurs between 1 February and 31 August although breeding in December has been documented (Thompson 1971, Gervais et al. 2008); breeding behavior includes nest site selection by the male, pair formation, copulation, egg laying, hatching, fledging, and post-fledging care of young by the parents. The peak of the breeding season occurs between 15 April and 15 July and is the period when most burrowing owls have active nests (eggs or young). The incubation period lasts 29 days (Coulombe 1971) and young fledge after 44 days (Haug et al. 1993). Note that the timing of nesting activities may vary with latitude and climatic conditions. Burrowing owls may change burrows several times during the breeding season, starting when nestlings are about three weeks old (Haug et al. 1993).

Dispersal

The following discussion is an excerpt from Gervais et al (2008):

> "The burrowing owl is often considered a sedentary species (e.g., Thomsen 1971). A large proportion of adults show strong fidelity to their nest site from year to year, especially where resident, as in Florida (74% for females, 83% for males; Millsap and Bear 1997). In California, nest-site fidelity rates were 32%–50% in a large grassland and 57% in an agricultural environment (Ronan 2002, Catlin 2004, Catlin et al. 2005). Differences in these rates among sites may reflect differences in nest predation rates (Catlin 2004, Catlin et al. 2005). Despite the high nest fidelity rates, dispersal distances may be considerable for both juveniles (natal dispersal) and adults (postbreeding dispersal), but this also varied with location (Catlin 2004, Rosier et al. 2006). Distances of 53 km to roughly 150 km have been observed in California for adult and natal dispersal, respectively (D. K. Rosenberg and J. A. Gervais, unpublished data), despite the difficulty in detecting movements beyond the immediate study area (Koenig et al. 1996)."

Habitat

The burrowing owl is a small, long-legged, ground-dwelling bird species, well-adapted to open, relatively flat expanses. In California, preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography and well-drained soils (Haug et al. 1993). Grassland, shrub steppe, and desert are naturally occurring habitat types used by the species. In addition, burrowing owls may occur in some agricultural areas, ruderal grassy fields, vacant lots and pastures if the vegetation structure is suitable and there are useable burrows and foraging habitat in proximity (Gervais et al 2008). Unique amongst North

American raptors, the burrowing owl requires underground burrows or other cavities for nesting during the breeding season and for roosting and cover, year round. Burrows used by the owls are usually dug by other species termed host burrowers. In California, California ground squirrel (*Spermophilus beecheyi*) and round-tailed ground squirrel (*Citellus tereticaudus*) burrows are frequently used by burrowing owls but they may use dens or holes dug by other fossorial species including badger (*Taxidea taxus*), coyote (*Canis latrans*), and fox (e.g., San Joaquin kit fox, *Vulpes macrotis mutica*; Ronan 2002). In some instances, owls have been known to excavate their own burrows (Thompson 1971, Barclay 2007). Natural rock cavities, debris piles, culverts, and pipes also are used for nesting and roosting (Rosenberg et al. 1998). Burrowing owls have been documented using artificial burrows for nesting and cover (Smith and Belthoff, 2003).

Foraging habitat. Foraging habitat is essential to burrowing owls. The following discussion is an excerpt from Gervais et al. (2008):

> "Useful as a rough guide to evaluating project impacts and appropriate mitigation for burrowing owls, adult male burrowing owls home ranges have been documented (calculated by minimum convex polygon) to comprise anywhere from 280 acres in intensively irrigated agroecosystems in Imperial Valley (Rosenberg and Haley 2004) to 450 acres in mixed agricultural lands at Lemoore Naval Air Station, CA (Gervais et al. 2003), to 600 acres in pasture in Saskatchewan, Canada (Haug and Oliphant 1990). But owl home ranges may be much larger, perhaps by an order of magnitude, in non-irrigated grasslands such as at Carrizo Plain, California (Gervais et al. 2008), based on telemetry studies and distribution of nests. Foraging occurs primarily within 600 m of their nests (within approximately 300 acres, based on a circle with a 600 m radius) during the breeding season."

Importance of burrows and adjacent habitat. Burrows and the associated surrounding habitat are essential ecological requisites for burrowing owls throughout the year and especially during the breeding season. During the non-breeding season, burrowing owls remain closely associated with burrows, as they continue to use them as refuge from predators, shelter from weather and roost sites. Resident populations will remain near the previous season's nest burrow at least some of the time (Coulombe 1971, Thomsen 1971, Botelho 1996, LaFever et al. 2008).

In a study by Lutz and Plumpton (1999) adult males and females nested in formerly used sites at similar rates (75% and 63%, respectively) (Lutz and Plumpton 1999). Burrow fidelity has been reported in some areas; however, more frequently, burrowing owls reuse traditional nesting areas without necessarily using the same burrow (Haug et al. 1993, Dechant et al. 1999). Burrow and nest sites are re-used at a higher rate if the burrowing owl has reproduced successfully during the previous year (Haug et al. 1993) and if the number of burrows isn't limiting nesting opportunity.

Burrowing owls may use "satellite" or non-nesting burrows, moving young at 10-14 days, presumably to reduce risk of predation (Desmond and Savidge 1998) and possibly to avoid nest parasites (Dechant et al. 1999). Successful nests in Nebraska had more active satellite burrows within 75 m of the nest burrow than unsuccessful nests (Desmond and Savidge

1999). Several studies have documented the number of satellite burrows used by young and adult burrowing owls during the breeding season as between one and 11 burrows with an average use of approximately five burrows (Thompsen 1984, Haug 1985, Haug and Oliphant 1990). Supporting the notion of selecting for nest sites near potential satellite burrows, Ronan (2002) found burrowing owl families would move away from a nest site if their satellite burrows were experimentally removed through blocking their entrance.

Habitat adjacent to burrows has been documented to be important to burrowing owls. Gervais et al. (2003) found that home range sizes of male burrowing owls during the nesting season were highly variable within but not between years. Their results also suggested that owls concentrate foraging efforts within 600 meters of the nest burrow, as was observed in Canada (Haug and Oliphant 1990) and southern California (Rosenberg and Haley 2004). James et al. (1997), reported habitat modification factors causing local burrowing owl declines included habitat fragmentation and loss of connectivity.

In conclusion, the best available science indicates that essential habitat for the burrowing owl in California must include suitable year-round habitat, primarily for breeding, foraging, wintering and dispersal habitat consisting of short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey within close proximity to the burrow.

Threats to Burrowing Owls in California

Habitat loss. Habitat loss, degradation, and fragmentation are the greatest threats to burrowing owls in California. According to DeSante et al. (2007), "the vast majority of burrowing owls [now] occur in the wide, flat lowland valleys and basins of the Imperial Valley and Great Central Valley [where] for the most part,...the highest rates of residential and commercial development in California are occurring." Habitat loss from the State's long history of urbanization in coastal counties has already resulted in either extirpation or drastic reduction of burrowing owl populations there (Gervais et al. 2008). Further, loss of agricultural and other open lands (such as grazed landscapes) also negatively affect owl populations. Because of their need for open habitat with low vegetation, burrowing owls are unlikely to persist in agricultural lands dominated by vineyards and orchards (Gervais et al. 2008).

Control of burrowing rodents. According to Klute et al. (2003), the elimination of burrowing rodents through control programs is a primary factor in the recent and historical decline of burrowing owl populations nationwide. In California, ground squirrel burrows are most often used by burrowing owls for nesting and cover; thus, ground squirrel control programs may affect owl numbers in local areas by eliminating a necessary resource.

Direct mortality. Burrowing owls suffer direct losses from a number of sources. Vehicle collisions are a significant source of mortality especially in the urban interface and where owls nest alongside roads (Haug et al. 1993, Gervais et al. 2008). Road and ditch maintenance, modification of water conveyance structures (Imperial Valley) and discing to control weeds in fallow fields may destroy burrows (Rosenberg and Haley 2004, Catlin and Rosenberg 2006) which may trap or crush owls. Wind turbines at Altamont Pass Wind Resource Area are known to cause direct burrowing owl mortality (Thelander et al. 2003). Exposure to

pesticides may pose a threat to the species but is poorly understood (Klute et al. 2003, Gervais et al. 2008).

Appendix B. Definitions

Some key terms that appear in this document are defined below.

Adjacent habitat means burrowing owl habitat that abuts the area where habitat and burrows will be impacted and rendered non-suitable for occupancy.

Breeding (nesting) season begins as early as 1 February and continues through 31 August (Thomsen 1971, Zarn 1974). The timing of breeding activities may vary with latitude and climatic conditions. The breeding season includes pairing, egg-laying and incubation, and nestling and fledging stages.

Burrow exclusion is a technique of installing one-way doors in burrow openings during the non-breeding season to temporarily exclude burrowing owls or permanently exclude burrowing owls and excavate and close burrows after confirming burrows are empty.

Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey.

Burrow surrogates include culverts, piles of concrete rubble, piles of soil, burrows created along soft banks of ditches and canals, pipes, and similar structures.

Civil twilight - Morning civil twilight begins when the geometric center of the sun is 6 degrees below the horizon (civil dawn) and ends at sunrise. Evening civil twilight begins at sunset and ends when the geometric center of the sun reaches 6 degrees below the horizon (civil dusk). During this period there is enough light from the sun that artificial sources of light may not be needed to carry on outdoor activities. This concept is sometimes enshrined in laws, for example, when drivers of automobiles must turn on their headlights (called lighting-up time in the UK); when pilots may exercise the rights to fly aircraft. Civil twilight can also be described as the limit at which twilight illumination is sufficient, under clear weather conditions, for terrestrial objects to be clearly distinguished; at the beginning of morning civil twilight, or end of evening civil twilight, the horizon is clearly defined and the brightest stars are visible under clear atmospheric conditions.

Conservation for burrowing owls may include but may not be limited to protecting remaining breeding pairs or providing for population expansion, protecting and enhancing breeding and essential habitat, and amending or augmenting land use plans to stabilize populations and other specific actions to avoid the need to list the species pursuant to California or federal Endangered Species Acts.

Contiguous means connected together so as to form an uninterrupted expanse in space.

Essential habitat includes nesting, foraging, wintering, and dispersal habitat.

Foraging habitat is habitat within the estimated home range of an occupied burrow, supports suitable prey base, and allows for effective hunting.

Host burrowers include ground squirrels, badgers, foxes, coyotes, gophers etc.

Locally significant species is a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range or occurring in a unique habitat type.

Non-breeding season is the period of time when nesting activity is not occurring, generally September 1 through January 31, but may vary with latitude and climatic conditions.

Occupied site or occupancy means a site that is assumed occupied if at least one burrowing owl has been observed occupying a burrow within the last three years (Rich 1984). Occupancy of suitable burrowing owl habitat may also be indicated by owl sign including its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site.

Other impacting activities may include but may not be limited to agricultural practices, vegetation management and fire control, pest management, conversion of habitat from rangeland or natural lands to more intensive agricultural uses that could result in “take”. These impacting activities may not meet the definition of a project under CEQA.

Passive relocation is a technique of installing one-way doors in burrow openings to temporarily or permanently evict burrowing owls and prevent burrow re-occupation.

Peak of the breeding season is between 15 April and 15 July.

Sign includes its tracks, molted feathers, cast pellets (defined as 1-2” long brown to black regurgitated pellets consisting of non-digestible portions of the owls’ diet, such as fur, bones, claws, beetle elytra, or feathers), prey remains, egg shell fragments, owl white wash, nest burrow decoration materials (e.g., paper, foil, plastic items, livestock or other animal manure, etc.), possible owl perches, or other items.

Appendix C. Habitat Assessment and Reporting Details

Habitat Assessment Data Collection and Reporting

Current scientific literature indicates that it would be most effective to gather the data in the manner described below when conducting project scoping, conducting a habitat assessment site visit and preparing a habitat assessment report:

1. Conduct at least one visit covering the entire potential project/activity area including areas that will be directly or indirectly impacted by the project. Survey adjoining areas within 150 m (Thomsen 1971, Martin 1973), or more where direct or indirect effects could potentially extend offsite. If lawful access cannot be achieved to adjacent areas, surveys can be performed with a spotting scope or other methods.
2. Prior to the site visit, compile relevant biological information for the site and surrounding area to provide a local and regional context.
3. Check all available sources for burrowing owl occurrence information regionally prior to a field inspection. The CNDDB and BIOS (see References cited) may be consulted for known occurrences of burrowing owls. Other sources of information include, but are not limited to, the Proceedings of the California Burrowing Owl Symposium (Barclay et al. 2007), county bird atlas projects, Breeding Bird Survey records, eBIRD (http://ebird.org), Gervais et al. (2008), local reports or experts, museum records, and other site-specific relevant information.
4. Identify vegetation and habitat types potentially supporting burrowing owls in the project area and vicinity.
5. Record and report on the following information:
    a. A full description of the proposed project, including but not limited to, expected work periods, daily work schedules, equipment used, activities performed (such as drilling, construction, excavation, etc.) and whether the expected activities will vary in location or intensity over the project's timeline;
    b. A regional setting map, showing the general project location relative to major roads and other recognizable features;
    c. A detailed map (preferably a USGS topo 7.5' quad base map) of the site and proposed project, including the footprint of proposed land and/or vegetation-altering activities, base map source, identifying topography, landscape features, a north arrow, bar scale, and legend;
    d. A written description of the biological setting, including location (Section, Township, Range, baseline and meridian), acreage, topography, soils, geographic and hydrologic characteristics, land use and management history on and adjoining the site (i.e., whether it is urban, semi-urban or rural; whether there is any evidence of past or current livestock grazing, mowing, disking, or other vegetation management activities);
    e. An analysis of any relevant, historical information concerning burrowing owl use or occupancy (breeding, foraging, over-wintering) on site or in the assessment area;
    f. Vegetation type and structure (using Sawyer et al. 2009), vegetation height, habitat types and features in the surrounding area plus a reasonably sized (as supported with logical justification) assessment area; (Note: use caution in discounting habitat based on grass height as it can be a temporary condition variable by season and conditions (such as current grazing regime) or may be distributed as a mosaic).

g. The presence of burrowing owl individuals or pairs or sign (see Appendix B);
h. The presence of suitable burrows and/or burrow surrogates (>11 cm in diameter (height and width) and >150 cm in depth) (Johnson et al. 2010), regardless of a lack of any burrowing owl sign and/or burrow surrogates; and burrowing owls and/or their sign that have recently or historically (within the last 3 years) been identified on or adjacent to the site.

Appendix D. Breeding and Non-breeding Season Surveys and Reports

Current scientific literature indicates that it is most effective to conduct breeding and non-breeding season surveys and report in the manner that follows:

Breeding Season Surveys

Number of visits and timing. Conduct 4 survey visits: 1) at least one site visit between 15 February and 15 April, and 2) a minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June. Note: many burrowing owl migrants are still present in southwestern California during mid-March, therefore, exercise caution in assuming breeding occupancy early in the breeding season.

Survey method. Rosenberg et al. (2007) confirmed walking line transects were most effective in smaller habitat patches. Conduct surveys in all portions of the project site that were identified in the Habitat Assessment and fit the description of habitat in Appendix A. Conduct surveys by walking straight-line transects spaced 7 m to 20 m apart, adjusting for vegetation height and density (Rosenberg et al. 2007). At the start of each transect and, at least, every 100 m, scan the entire visible project area for burrowing owls using binoculars. During walking surveys, record all potential burrows used by burrowing owls as determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration. Some burrowing owls may be detected by their calls, so observers should also listen for burrowing owls while conducting the survey.

Care should be taken to minimize disturbance near occupied burrows during all seasons and not to "flush" burrowing owls especially if predators are present to reduce any potential for needless energy expenditure or burrowing owl mortality. Burrowing owls may flush if approached by pedestrians within 50 m (Conway et al. 2003). If raptors or other predators are present that may suppress burrowing owl activity, return at another time or later date for a follow-up survey.

Check all burrowing owls detected for bands and/or color bands and report band combinations to the Bird Banding Laboratory (BBL). Some site-specific variations to survey methods discussed below may be developed in coordination with species experts and Department staff.

Weather conditions. Poor weather may affect the surveyor's ability to detect burrowing owls, therefore, avoid conducting surveys when wind speed is >20 km/hr, and there is precipitation or dense fog. Surveys have greater detection probability if conducted when ambient temperatures are >20º C, <12 km/hr winds, and cloud cover is <75% (Conway et al. 2008).

Time of day. Daily timing of surveys varies according to the literature, latitude, and survey method. However, surveys between morning civil twilight and 10:00 AM and two hours before sunset until evening civil twilight provide the highest detection probabilities (Barclay pers. comm. 2012, Conway et al. 2008).

Alternate methods. If the project site is large enough to warrant an alternate method, consult current literature for generally accepted survey methods and consult with the Department on the proposed survey approach.

Additional breeding season site visits. Additional breeding season site visits may be necessary, especially if non-breeding season exclusion methods are contemplated. Detailed information, such as approximate home ranges of each individual or of family units, as well as foraging areas as related to the proposed project, will be important to document for evaluating impacts, planning avoidance measure implementation and for mitigation measure performance monitoring.

Adverse conditions may prevent investigators from determining presence or occupancy. Disease, predation, drought, high rainfall or site disturbance may preclude presence of burrowing owls in any given year. Any such conditions should be identified and discussed in the survey report. Visits to the site in more than one year may increase the likelihood of detection. Also, visits to adjacent known occupied habitat may help determine appropriate survey timing.

Given the high site fidelity shown by burrowing owls (see Appendix A, Importance of burrows), conducting surveys over several years may be necessary when project activities are ongoing, occur annually, or start and stop seasonally. (See Negative surveys).

Non-breeding Season Surveys

If conducting non-breeding season surveys, follow the methods described above for breeding season surveys, but conduct at least four (4) visits, spread evenly, throughout the non-breeding season. Burrowing owl experts and local Department staff are available to assist with interpreting results.

Negative Surveys

Adverse conditions may prevent investigators from documenting presence or occupancy. Disease, predation, drought, high rainfall or site disturbance may preclude presence of burrowing owl in any given year. Discuss such conditions in the Survey Report. Visits to the site in more than one year increase the likelihood of detection and failure to locate burrowing owls during one field season does not constitute evidence that the site is no longer occupied, particularly if adverse conditions influenced the survey results. Visits to other nearby known occupied sites can affirm whether the survey timing is appropriate.

Take Avoidance Surveys

Field experience from 1995 to present supports the conclusion that it would be effective to complete an initial take avoidance survey no less than 14 days prior to initiating ground disturbance activities using the recommended methods described in the Detection Surveys section above. Implementation of avoidance and minimization measures would be triggered by positive owl presence on the site where project activities will occur. The development of avoidance and minimization approaches would be informed by monitoring the burrowing owls.

Burrowing owls may re-colonize a site after only a few days. Time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance.

Survey Reports

Report on the survey methods used and results including the information described in the Summary Report and include the reports within the CEQA documentation:

1. Date, start and end time of surveys including weather conditions (ambient temperature, wind speed, percent cloud cover, precipitation and visibility);
2. Name(s) of surveyor(s) and qualifications;
3. A discussion of how the timing of the survey affected the comprehensiveness and detection probability;
4. A description of survey methods used including transect spacing, point count dispersal and duration, and any calls used;
5. A description and justification of the area surveyed relative to the project area;
6. A description that includes: number of owls or nesting pairs at each location (by nestlings, juveniles, adults, and those of an unknown age), number of burrows being used by owls, and burrowing owl sign at burrows. Include a description of individual markers, such as bands (numbers and colors), transmitters, or unique natural identifying features. If any owls are banded, request documentation from the BBL and bander to report on the details regarding the known history of the banded burrowing owl(s) (age, sex, origins, whether it was previously relocated) and provide with the report if available;
7. A description of the behavior of burrowing owls during the surveys, including feeding, resting, courtship, alarm, territorial defense, and those indicative of parents or juveniles;
8. A list of possible burrowing owl predators present and documentation of any evidence of predation of owls;
9. A detailed map (1:24,000 or closer to show details) showing locations of all burrowing owls, potential burrows, occupied burrows, areas of concentrated burrows, and burrowing owl sign. Locations documented by use of global positioning system (GPS) coordinates must include the datum in which they were collected. The map should include a title, north arrow, bar scale and legend;
10. Signed field forms, photos, etc., as appendices to the field survey report;
11. Recent color photographs of the proposed project or activity site; and
12. Original CNDDB Field Survey Forms should be sent directly to the Department's CNDDB office, and copies should be included in the environmental document as an appendix. (http://www.dfg.ca.gov/bdb/html/cnddb.html).

Appendix E. Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans

Whereas the Department does not recommend exclusion and burrow closure, current scientific literature and experience from 1995 to present, indicate that the following example components for burrowing owl artificial burrow and exclusion plans, combined with consultation with the Department to further develop these plans, would be effective.

Artificial Burrow Location

If a burrow is confirmed occupied on-site, artificial burrow locations should be appropriately located and their use should be documented taking into consideration:

1. A brief description of the project and project site pre-construction;
2. The mitigation measures that will be implemented;
3. Potential conflicting site uses or encumbrances;
4. A comparison of the occupied burrow site(s) and the artificial burrow site(s) (e.g., vegetation, habitat types, fossorial species use in the area, and other features);
5. Artificial burrow(s) proximity to the project activities, roads and drainages;
6. Artificial burrow(s) proximity to other burrows and entrance exposure;
7. Photographs of the site of the occupied burrow(s) and the artificial burrows;
8. Map of the project area that identifies the burrow(s) to be excluded as well as the proposed sites for the artificial burrows;
9. A brief description of the artificial burrow design;
10. Description of the monitoring that will take place during and after project implementation including information that will be provided in a monitoring report.
11. A description of the frequency and type of burrow maintenance.

Exclusion Plan

An Exclusion Plan addresses the following including but not limited to:

1. Confirm by site surveillance that the burrow(s) is empty of burrowing owls and other species preceding burrow scoping;
2. Type of scope and appropriate timing of scoping to avoid impacts;
3. Occupancy factors to look for and what will guide determination of vacancy and excavation timing (one-way doors should be left in place 48 hours to ensure burrowing owls have left the burrow before excavation, visited twice daily and monitored for evidence that owls are inside and can't escape i.e., look for sign immediately inside the door).
4. How the burrow(s) will be excavated. Excavation using hand tools with refilling to prevent reoccupation is preferable whenever possible (may include using piping to stabilize the burrow to prevent collapsing until the entire burrow has been excavated and it can be determined that no owls reside inside the burrow);
5. Removal of other potential owl burrow surrogates or refugia on site;
6. Photographing the excavation and closure of the burrow to demonstrate success and sufficiency;

7. Monitoring of the site to evaluate success and, if needed, to implement remedial measures to prevent subsequent owl use to avoid take;
8. How the impacted site will continually be made inhospitable to burrowing owls and fossorial mammals (e.g., by allowing vegetation to grow tall, heavy disking, or immediate and continuous grading) until development is complete.

Appendix F. Mitigation Management Plan and Vegetation Management Goals

Mitigation Management Plan

A mitigation site management plan will help ensure the appropriate implementation and maintenance for the mitigation site and persistence of the burrowing owls on the site. For an example to review, refer to Rosenberg et al. (2009). The current scientific literature and field experience from 1995 to present indicate that an effective management plan includes the following:

1. Mitigation objectives;
2. Site selection factors (including a comparison of the attributes of the impacted and conserved lands) and baseline assessment;
3. Enhancement of the conserved lands (enhancement of reproductive capacity, enhancement of breeding areas and dispersal opportunities, and removal or control of population stressors);
4. Site protection method and prohibited uses;
5. Site manager roles and responsibilities;
6. Habitat management goals and objectives:
    a. Vegetation management goals,
        i. Vegetation management tools:
            1. Grazing
            2. Mowing
            3. Burning
            4. Other
    b. Management of ground squirrels and other fossorial mammals,
    c. Semi-annual and annual artificial burrow cleaning and maintenance,
    d. Non-natives control – weeds and wildlife,
    e. Trash removal;
7. Financial assurances:
    a. Property analysis record or other financial analysis to determine long-term management funding,
    b. Funding schedule;
8. Performance standards and success criteria;
9. Monitoring, surveys and adaptive management;
10. Maps;
11. Annual reports.

Vegetation Management Goals

- Manage vegetation height and density (especially in immediate proximity to burrows). Suitable vegetation structure varies across sites and vegetation types, but should generally be at the average effective vegetation height of 4.7 cm (Green and Anthony 1989) and <13 cm average effective vegetation height (MacCracken et al. 1985*a)*.
- Employ experimental prescribed fires (controlled, at a small scale) to manage vegetation structure;

- Vegetation reduction or ground disturbance timing, extent, and configuration should avoid take. While local ordinances may require fire prevention through vegetation management, activities like disking, mowing, and grading during the breeding season can result in take of burrowing owls and collapse of burrows, causing nest destruction. Consult the take avoidance surveys section above for pre-management avoidance survey recommendations;
- Promote natural prey distribution and abundance, especially in proximity to occupied burrows; and
- Promote self-sustaining populations of host burrowers by limiting or prohibiting lethal rodent control measures and by ensuring food availability for host burrowers through vegetation management.

Refer to Rosenberg et al. (2009) for a good discussion of managing grasslands for burrowing owls.

Mitigation Site Success Criteria

In order to evaluate the success of mitigation and management strategies for burrowing owls, monitoring is required that is specific to the burrowing owl management plan. Given limited resources, Barclay et al. (2011) suggests managers focus on accurately estimating annual adult owl populations rather than devoting time to estimating reproduction, which shows high annual variation and is difficult to accurately estimate. Therefore, the key objective will be to determine accurately the number of adult burrowing owls and pairs, and if the numbers are maintained. A frequency of 5-10 years for surveys to estimate population size may suffice if there are no changes in the management of the nesting and foraging habitat of the owls.

Effective monitoring and evaluation of off-site and on-site mitigation management success for burrowing owls includes (Barclay, pers. comm.):

- Site tenacity;
- Number of adult owls present and reproducing;
- Colonization by burrowing owls from elsewhere (by band re-sight);
- Evidence and causes of mortality;
- Changes in distribution; and
- Trends in stressors.

Attachment 2

State Revolving Fund and CEQA-Plus Brochure

If project emissions are **below the "de minimis" levels** and less than 10% of the emissions inventory for the non-attainment or maintenance area, then:

- **Further general conformity analysis is not required.**

If project emissions are **above the "de minimis" levels**:

- **A conformity determination for the area must be made.**

A conformity determination can be made if facilities are sized to meet the needs of current population projections used in an **approved** State Implementation Plan (SIP) for air quality. Using population projections, applicants must **quantify** their description of how the proposed capacity increase was calculated.

NATIONAL HISTORIC PRESERVATION ACT

Section 106 of the NHPA requires federal agencies to take into account effects on historic properties caused by federal actions (such as funding SRF projects) and to provide the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings through consultation with the State Historic Preservation Officer (SHPO) and with interested Indian Tribes and individuals.

***USEPA has delegated to the State Water Board the responsibility for carrying out the requirements of Section 106 of the NHPA.**

Historic properties include:

- Archaeological sites.
- Historic era buildings.
- Traditional cultural properties.

Starting point for the 106 process: Applicant's record search and cultural resource documents prepared for CEQA.

State Water Board's Cultural Resource Officer (CRO) requires:

- Copies of all original maps and studies for consultation with SHPO.

If your project has the potential to affect historic properties the consultation process can be quite lengthy. **Please contact the CRO early in your planning process to discuss what additional information may be needed for your specific project.**

Environmental Review Process Guidelines for State Revolving Fund Loan Applicants document provides additional information on the review process and can be found on the State Water Board's web site located at**:**

http://www.waterboards.ca.gov/funding/srf.html

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

SRF & CEQA-PLUS

Environmental Review for State Revolving Fund (SRF) Loan Applicants

- WHAT - WHY - HOW -

State Water Resources Control Board
Division of Financial Assistance
November 2005

WHAT IS CEQA-PLUS?

The SRF Loan Program is partially funded by the U.S. Environmental Protection Agency (USEPA) and subject to federal environmental regulations, including the Endangered Species Act (ESA), the National Historic Preservation Act (NHPA), and the General Conformity Rule for the Clean Air Act (CAA), among others. Federal agencies have their own policies on how they comply with federal environmental laws. Instead of the National Environmental Policy Act (NEPA), USEPA has chosen to use the California Environmental Quality Act (CEQA) as the compliance base for California's SRF Loan Program, in addition to compliance with ESA, NHPA and CAA. Collectively, the State Water Board calls these requirements CEQA-Plus**.** Additional federal regulations also may apply.

Lead Agency: **The Applicant**

Duties:

- Prepare, circulate and consider the environmental documents prior to approving the project.
- Provide the State Water Board with eight (8) copies of the applicant's CEQA documents.

Responsible Agency: **State Water Board, Division of Financial Assistance**

Duties:

- Acting on behalf of USEPA, review and consider the CEQA documents before approving the project's funding.
- Make findings as to the adequacy of the documents and require additional studies or documentation, as needed.
- Distribute the applicant's CEQA documents to selected federal agencies for review and comment before making a determination on adequacy. (This distribution is in addition to the standard State Clearinghouse distribution under CEQA.)

***The applicant must address all comments by federal agencies before funding is approved.**

ENDANGERED SPECIES ACT

Non-federal Representative (for all wastewater and water reclamation projects in California that involve an SRF loan): **State Water Board**

State Water Board - Environmental Services Staff (ES) reviews SRF projects to determine potential effects on federally listed species.

Applicant Duties:

- At the earliest possible date, provide ES with:
  - **Species lists.**
  - **Biological assessments.**
  - **Other documents related to project effects on sensitive species.**
- Notify ES **early** during the planning process of any issues regarding sensitive species.

ES Duties:

- Confer informally with the U.S. Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS), as necessary.
- Evaluate and inform USFWS/NMFS of project impacts to federally listed species.
- Ask USEPA to request formal consultation if ES, in conjunction with USFWS/NMFS, determines that a project will adversely affect a federally listed species.

***USEPA will act as the lead agency in the formal consultation process. In response to a formal request from USEPA, USFWS/NMFS may have up to 90 days to prepare a biological opinion. The process can last 135 days or longer.**

CLEAN AIR ACT

CAA general conformity analysis applies only to projects in areas:

- Not meeting National Ambient Air Quality Standards (NAAQS).
- Subject to a maintenance plan.

An analysis is necessary for each **criteria pollutant below** for which an area is considered as being in nonattainment or maintenance:

- **ozone**
- **carbon monoxide**
- **nitrogen dioxide**
- **sulfur dioxide**
- **lead**
- **inhalable particulate matter**