

FRESNO METROPOLITAN WATER RESOURCES MANAGEMENT PLAN UPDATE

Final Environmental Impact Report
SCH# 2013091021

Prepared for
City of Fresno

May 2014



FRESNO METROPOLITAN WATER RESOURCES MANAGEMENT PLAN UPDATE

Final Environmental Impact Report
SCH# 2013091021

Prepared for
City of Fresno

May 2014



2600 Capitol Avenue
Suite 200
Sacramento, CA 95816
916.564.4500
www.esassoc.com

Los Angeles

Oakland

Orlando

Palm Springs

Petaluma

Portland

San Diego

San Francisco

Santa Cruz

Seattle

Tampa

Woodland Hills

208754

OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

TABLE OF CONTENTS

City of Fresno Metropolitan Water Resources Master Plan Update Final Environmental Impact Report

	<u>Page</u>
1. Introduction	1-1
1.1 Introduction	1-1
1.2 Summary of Project and Project Objectives	1-1
1.3 Public Participation and Environmental Review Process	1-3
1.4 CEQA Certification and Project Approval	1-4
1.5 Organization of FEIR	1-4
2. Summary of Text Changes to the Draft EIR	2-1
2.1 Introduction	2-1
3. Responses to Comments	3-1
Letter 1: Governor's Office of Planning and Research	3-2
Letter 2: San Joaquin Valley Air Pollution Control District	3-5
Letter 3: Fresno Irrigation District	3-7
Letter 4: Bakman Water Company	3-14
Letter 5: Fresno Yosemite International Airport	3-20
Appendices	
A. Mitigation Monitoring and Reporting Program	A-1

CHAPTER 1

Introduction

1.1 Introduction

The City of Fresno (Fresno or City) circulated the City of Fresno Metropolitan Water Resources Management Plan Update (proposed project or Metro Plan Update) Draft Environmental Impact Report (EIR) for public and agency review and comment between February 14, 2014 and April 1, 2014. At the end of the 45-day public comment period, a total of five written letters were received addressing the content and analysis in the Draft EIR.

This document is the Final EIR for the proposed project and it contains written responses to all comments received by City of Fresno on the Draft EIR. The responses to comments clarify and amplify text in the Draft EIR and do not change the findings or conclusions of the Draft EIR. In addition, this Final EIR includes a list of commenters, comment letters received, and the Mitigation Monitoring and Reporting Program (MMRP) which identifies the adopted mitigation measures, timing of action and responsibilities for implementation and monitoring.

This Final EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) and together with the Draft EIR (and appendices) constitutes the EIR for the proposed Metro Plan Update.

The Metro Plan EIR is both a project and a program EIR. As a project EIR it evaluates the environmental impacts of proposed near-term project elements consistent with *CEQA Guidelines* section 15161. Future project elements are evaluated at a program level. Implementation of specific future project elements will be examined in the light of this EIR to determine whether additional subsequent environmental review is required (*CEQA Guidelines* section 15168).

1.2 Summary of Project and Project Objectives

1.2.1 Summary of Project

The Metro Plan Update proposes a comprehensive and integrated water supply plan to better manage the City's diverse water supplies, address groundwater level declines beneath the City's service area and groundwater quality concerns, and further balance and optimize the City's conjunctive use of its diversified water supply portfolio which would ultimately enhance overall water supply reliability. Key components of the proposed Metro Plan Update include:

- **Expand Demand Management and Water Conservation Measures.** Complete implementation of the on-going residential water metering program by 2013 and implementation of additional water conservation measures (at the time this Draft EIR was published the metering program had been completed).
- **Expand Use of Treated Surface Water Supplies.** Increase surface water treatment capacity by constructing and operating a new Southeast (SE) Surface Water Treatment Facility (SWTF), an expanded Northeast (NE) SWTF and potentially a new Southwest (SW) SWTF.
- **Balance In-City Groundwater Operations by 2025.** Reduce City's groundwater pumping and increase intentional groundwater recharge with a goal of balancing the City's groundwater operations within the City's service area (e.g., pumping equal to recharge) by 2025.
- **Use Recycled Water Supplies for Non-Potable Water Demands.** Maximize the direct use of recycled water for in-City non-potable water uses and thereby reduce potable water demands.
- **Assess Need and Availability of Future New Supply.** Assess the need for and timing of future new water supplies once future growth plans beyond buildout of the 2025 General Plan is determined.

The Metro Plan Update also includes:

- **Objectives, Goals and Policies.** Metro Plan Update objectives, goals and policies target conjunctive use of available groundwater and surface water supplies to optimize use of available surface water supplies; and the management of the local groundwater basin in a sustainable manner, which minimizes or eliminates localized groundwater depression and groundwater quality degradation.
- **Operational Principles.** The operational principals would guide conjunctive use and development of water supply operations throughout the Plan area. Specific operational principles have been developed to: (1) maximize the use of treated surface water from the City's existing and planned SWTFs in conjunction with the City's groundwater supplies; and (2) use existing and proposed groundwater recharge facilities to ensure balanced City groundwater operations by 2025.
- **Water Supply Components.** How the City intends to develop and use treated surface water, groundwater, demand management /water conservation measures, recycled water and any potential new water supplies to meet existing and future water demands.
- **Proposed Facilities.** New water supply facilities are needed to support implementation of the Metro Plan Update water supply plan and provide sufficient supplies for 2025 General Plan buildout. Facility improvements are proposed for all of the water supply components – treated surface water facilities, water transmission mains and distribution pipelines, groundwater wells, groundwater recharge basins, recycled water facilities, plus facilities to implement demand management measures such as modification of landscapes to conserve water. Facility construction would be phased based upon what is needed in the near-term and what is to be completed for 2025 General Plan buildout.
- **Proposed Near-term Projects.** Development and operation of three near-term projects would be evaluated at a project-level. Near-term projects include upgrades to the existing NE SWTF; construction of a new SE SWTF, with 80 million gallons per day (mgd) total

design capacity; and regional water transmission mains and distribution pipelines located throughout the project area.

Project elements are proposed as both near-term and future projects, and are described in more detail in Chapter 3, Project Description of the Draft EIR.

1.2.2 Project Objectives

The overall objective of the City’s Metro Plan Update is to provide sustainable and reliable water supplies to meet the demand of existing and future customers through 2025. The overall goals are to:

- Optimize the conjunctive use of the City’s available surface water, groundwater, and recycled water supplies for direct treatment and use, and intentional groundwater recharge;
- Balance the City’s groundwater operations by 2025;
- Replenish groundwater basin storage;
- Continue to implement and expand demand management/water conservation measures in compliance with the City’s USBR contract and to achieve specific water conservation goals; and
- Utilize recycled water to meet in-City non-potable demands in new development areas and existing parts of the City.

1.3 Public Participation and Environmental Review Process

The following lists the actions that took place during the preparation, distribution and review of the Draft EIR.

- A Notice of Preparation (NOP) for preparation of the Draft EIR was filed with the State Clearinghouse (SCH #2013091021) on September 6, 2013. The 30-day comment period for the NOP ended October 14, 2013.
- The availability of the NOP was noticed in the Fresno Bee.
- The NOP was distributed to all responsible and trustee agencies, and interested groups, organizations and individuals and was made available for review at the following locations:
 - City website - www.fresno.gov/water (go to “Important Documents”)
 - City of Fresno Department of Public Utilities Water Division, 1910 East University Avenue, Fresno, CA 93703-2988
 - City of Fresno City Hall, 2600 Fresno Street, 4th Floor, Room 4019 Department of Public Utilities Administration, Fresno CA 93721
 - County of Fresno Central Library, 2420 Mariposa Street, Fresno CA 93721
- The City held two publically noticed scoping meetings on September 16th, 2013, to which the responsible and trustee agencies and interested members of the public were invited.

- The availability of the Draft EIR was noticed in the Fresno Bee.
- The Draft EIR was distributed for a 45 day comment period beginning February 14, 2014 through April 1, 2014, to all responsible and trustee agencies through the State Clearinghouse, and interested groups, organizations and individuals and was made available for review at the following locations:
 - City website - www.fresno.gov/water (go to “Important Documents”)
 - City of Fresno Department of Public Utilities Water Division, 1910 East University Avenue, Fresno, CA 93703-2988
 - City of Fresno City Hall, 2600 Fresno Street, 4th Floor, Room 4019 Department of Public Utilities Administration, Fresno CA 93721
 - County of Fresno Central Library, 2420 Mariposa Street, Fresno CA 93721

1.4 CEQA Certification and Project Approval

Prior to considering the project for approval, the City of Fresno City Council will review and consider the information presented in the EIR (Draft and Final EIR) and will certify that the EIR has been adequately prepared in accordance with CEQA. Once the EIR is certified, the City may proceed to consider project approval (*CEQA Guidelines* §15090 and 15096(f)). Prior to approving the project, the City shall make Findings regarding any significant, unavoidable environmental effects identified in the Final EIR, and if necessary, adopt Statements of Overriding Considerations regarding these impacts (*CEQA Guidelines* §15091 and 15093).

Following certification of the EIR and project approval, the City will file a Notice of Determination (NOD) with the County of Fresno Clerk and the State Clearinghouse. The Responsible Agencies and regulatory agencies will then adopt the certified EIR and file separate NODs prior to implementing their segments of the proposed project. Each Responsible Agency also shall make Findings and adopt Statements of Overriding Considerations for any significant, unavoidable environmental effects identified in the Final EIR (*CEQA Guidelines* §15096(h)).

1.5 Organization of FEIR

This Final EIR is organized as follows:

Chapter 1 – Introduction: This chapter summarizes the proposed project, describes the content and format of the Final EIR, summarizes the public participation and review process, and describes the CEQA certification and project approval process.

Chapter 2 – Summary of Text Changes to the Draft EIR: Chapter 2 summarizes revisions to the Draft EIR. These revisions are in response to comments made on the Draft EIR and/or staff-initiated text changes. The revisions contain clarification, amplification, and corrections that have been identified since publication of the Draft EIR.

Chapter 3 – Responses to Comments: Chapter 3 includes a list of the comment letters received followed by the comment letters and responses to the comments contained in each letter. The responses to comments are numbered consistent with the comment number in each letter. For example, the response to the first comment in Comment Letter 1 is Response to Comment 1-1.

Appendices

Appendix A - Mitigation Monitoring and Reporting Program: This chapter contains the MMRP for the timing, responsibility and monitoring of adopted mitigation measures.

CHAPTER 2

Summary of Text Changes to the Draft EIR

2.1 Introduction

This chapter presents corrections and revisions made to the Draft EIR initiated by responses to comments or by staff. New text is shown in double underline and text to be deleted is shown in ~~strike-out~~. The responses to comments clarify and amplify text in the Draft EIR and do not change the findings or conclusions of the Draft EIR.

Chapter 2, Background

The second paragraph on page 2-1 is revised to read as follows:

The City holds diversified rights to obtain both groundwater and surface water ~~and groundwater~~. The City holds rights to obtain surface water from the San Joaquin River through the United States Bureau of Reclamation's (USBR) Central Valley Project Friant Division and Kings River water through the Fresno Irrigation District (FID). The City has long-established rights to pump groundwater from the regional (Kings) groundwater subbasin. The City also percolates and stores ~~recharges and banks~~ its treated municipal wastewater ~~in the groundwater basin~~ for subsequent extraction and reuse.

Chapter 3, Project Description

The Second Bullet on page ES-3 and the sixth bullet on page 3-4 are revised to read as follows:

- **Objectives, Goals and Policies.** Metro Plan Update objectives, goals and policies target conjunctive use of available groundwater and surface water supplies to optimize use of available surface water supplies; and the management of the local groundwater basin in a sustainable manner, which minimizes or eliminates localized groundwater ~~overdraft~~ depressions and groundwater quality degradation.

The second paragraph on page 3-17 is revised to read as follows:

...Perimeter fencing would be consistent with the proposed changes at the NE SWTF and include installation of either a seven foot masonry block wall topped with Sheppards Hooks to eight feet, or eight-foot wrought iron fence, depending on the specific location, so that the fence best integrates with the adjacent facility building and is in accordance with applicable Homeland Security requirements. ...

Section 4.3, Geology and Soils

Mitigation Measure 4.3.1a in Table ES-3 (page ES-&) and in Section 4.3 (page 4.3-13) is revised to read as follows:

Measure 4.3.1a (NT/F): The City shall prepare a site-specific soil and geotechnical engineering study prior to final design of individual projects under the Metro Plan Update. Each study shall be performed by a licensed professional including, but not limited to, a geologist, engineering geologist, certified soil scientist, certified agronomist, registered agricultural engineer, registered civil or structural engineer, and/or certified professional erosion and sediment control specialist with expertise in geotechnical engineering issues who is registered and/or certified in the State of California, to determine site specific impacts and to recommend site specific mitigations. The site-specific soil and geotechnical engineering studies shall be submitted to ~~the~~ all appropriate State and local regulatory agencies including, but not limited to, City of Fresno's Building and Safety Services Division for review and approval. All feasible recommendations addressing potential seismic hazards and soil constraints shall be implemented.

Section 4.5, Biological Resources

The fourth bullet of Mitigation Measure 4.5.6 in Table ES-3 (page ES-14) and in Section 4.5 (page 4.5-43) is revised to read as follows:

- Removal of trees showing evidence of active bat activity shall occur during the period least likely to affect bats, as determined by a qualified bat biologist (generally between February 15 and October 15 for winter hibernacula, and between August 15 and April 15 for maternity roosts). If the exclusion of bats from potential roost sites is necessary to prevent indirect impacts due to construction noise and adjacent human activity ~~adjacent~~, bat exclusion activities (e.g., installation of netting to block roost entrances) shall also be conducted during these periods.

Section 4.8, Noise

The first bullet for Mitigation Measure 4.8.1 in Table ES-3 (page ES-27) and in Section 4.8 (page 4.8-15) is revised to read as follows:

- Sensitive receptors (residences, residential areas, schools, and hospitals) within 1,500 feet of project construction activities shall be identified and mapped, and this information shall be used to minimize noise impacts to sensitive receptors.

Section 4.12, Cultural Resources

Mitigation Measure 4.12.3a in Table ES-3 (page ES-35) and in Section 4.12 (page 4.12-24) is revised to read as follows:

Measure 4.12.3a (NT/F): If human skeletal remains are uncovered during proposed project construction, work in the vicinity of the find shall cease and the Fresno County coroner will be contacted to evaluate the remains, following the procedures and protocols set forth in section 15064.5 (e)(1) of the *CEQA Guidelines*. If the County coroner determines that the remains are Native American, the ~~proposed project proponent~~ the City of Fresno will

contact the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641) and the Most Likely Descendant will be identified. The Most Likely Descendant will make recommendations for the treatment of any human remains.

CHAPTER 3

Responses to Comments

At the end of the public circulation period, a total of five letters were received, and they are listed below in Table 3.1. Each letter has been assigned a number. Individual comments within each letter have been bracketed based on the issue presented and assigned a number. For example, the first comment in Letter 1 is comment number 1-1. Following each comment letter are the responses to the individual bracketed comments. Where it is appropriate to fully respond to a comment, references are provided to other responses in this Final EIR. Text changes in response to comments are included in the individual responses in this chapter, and they are summarized in Chapter, 2 Summary of Text Changes to the Draft EIR.

**TABLE 3-1
COMMENT LETTERS SUBMITTED ON THE DRAFT EIR**

Comment ID	Organization/ Affiliation	Page Number
Letter 1	Governor's Office of Planning and Research	3-2
Letter 2	San Joaquin Valley Air Pollution Control District	3-5
Letter 3	Fresno Irrigation District	3-7
Letter 4	Bakman Water Company	3-14
Letter 5	Fresno Yosemite International Airport	3-20



EDMUND G. BROWN JR.
GOVERNOR

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



KEN ALEX
DIRECTOR

April 2, 2014

Brock Buche
City of Fresno
1910 East University Avenue
Fresno, CA 93703-2988

Subject: Fresno Metropolitan Water Resources Management Plan Update
SCH#: 2013091021

Dear Brock Buche:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on April 1, 2014, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Scott Morgan".

Scott Morgan
Director, State Clearinghouse

**Document Details Report
State Clearinghouse Data Base**

SCH# 2013091021
Project Title Fresno Metropolitan Water Resources Management Plan Update
Lead Agency Fresno, City of

Type EIR Draft EIR
Description The Metro Plan Update proposes a comprehensive and integrated water supply plan to better manage the City's diverse water supplies, address groundwater level declines beneath the City's service area and groundwater quality concerns, and further balance and optimize the City's conjunctive use of its diversified water supply portfolio which would ultimately enhance overall water supply reliability.

Lead Agency Contact

Name Brock Buche
Agency City of Fresno
Phone 559 621 5325 **Fax**
email
Address 1910 East University Avenue
City Fresno **State** CA **Zip** 93703-2988

Project Location

County Fresno
City Fresno
Region
Lat / Long
Cross Streets Various
Parcel No. Various
Township

Range **Section** **Base**

Proximity to:

Highways Hwy 41, 99, 168, 180
Airports Fresno
Railways
Waterways San Joaquin River Watershed
Schools Various
Land Use Various

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

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 4; 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; Air Resources Board; State Water Resources Control Board, Division of Financial Assistance; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Bd., Region 5 (Fresno); Native American Heritage Commission

Date Received 02/14/2014 **Start of Review** 02/14/2014 **End of Review** 04/01/2014

Letter 1: Governor's Office of Planning and Research State Clearinghouse and Planning Unit

Response to Comment 1-1

The comment acknowledges that the City has complied with the State Clearinghouse review requirements for the Draft EIR pursuant to CEQA.

From: FresnoMetroPlan
Sent: Monday, May 12, 2014 9:25 AM
To: Paul Garcia
Subject: FW: NOA - Fresno Metro Water Resources Mngmnt Plan Update EIRPlan Update EIR

From: Debbie Johnson [Debbie.Johnson@valleyair.org]
Sent: Friday, March 28, 2014 11:56 AM
To: FresnoMetroPlan
Subject: NOA - Fresno Metro Water Resources Mngmnt Plan Update EIRPlan Update EIR

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above consisting of Fresno Metro Water Resources Management Plan Update EIR in Fresno 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 Debbie Johnson at (559) 230-5817.

Thank you,

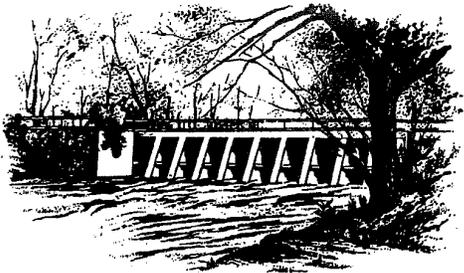
Debbie Johnson
Air Quality Specialist
San Joaquin Valley Air Pollution Control District
Phone: 559.230.5817
Email: debbie.johnson@valleyair.org

2-1

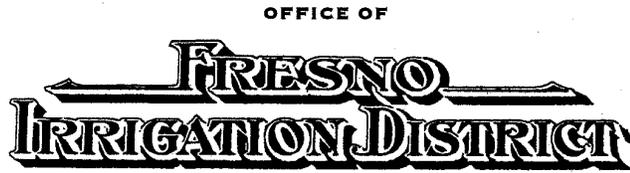
Letter 2: San Joaquin Valley Unified Air Pollution Control District

Response to Comment 2-1

The comment notes that the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) previously provided comments on the NOP (see Appendix B of the Draft EIR) and that they have no additional comments at this time. In summary, the NOP comment letter recommended that the EIR include a discussion of criteria pollutants, odors and health impacts along with discussion of the methods and assumptions used in the analysis. The SJVUAPCD also requested that the City identify which District rules the proposed project is subject to and fulfill any needed permit process. This information is provided in Section 4.7 of the Draft EIR.



YOUR MOST VALUABLE RESOURCE - WATER



TELEPHONE (559) 233-7161
FAX (559) 233-8227
2907 S. MAPLE AVENUE
FRESNO, CALIFORNIA 93725-2208

March 31, 2014

Mr. Brock D. Buche
Dept. of Public Utilities, Water Division
City of Fresno
1910 East University Avenue
Fresno, CA 93703

Re: City of Fresno's Metropolitan Water Resources Management Plan Update
Draft Environmental Impact Report – SCH# 2013091021

Dear Mr. Buche:

Thank you for the opportunity to review and comment on the City of Fresno's (City) Draft Environmental Impact Report (DEIR) for the City's Metropolitan Water Resources Management Plan (Metro Plan). The overall objective of the City's Metro Plan is to supply sufficient and reliable water supplies to meet the demands of existing and future customers through buildout of the applicable Fresno General Plan.

Due to time constraints, Fresno Irrigation District's (FID) comments of the scope of the DEIR are limited; however, we appreciate your consideration of the following comments:

1. Page ES-2 In Section ES.3, the document raises the possibility of a southwest surface water treatment facility. The issue is also discussed on Page 3-34 in Section 3.4.3. While it is good to plan ahead, the City is cautioned that considerable discussion must still take place between the agencies to determine whether it is even feasible to convey a large volume of water beyond the minimum entitlement to a specific location. Significant discussion on capacities and operations are needed.
2. Page 2-1 In Section 2.2, the document states that the City has rights to water from the San Joaquin River and Kings River. This term should be corrected or changed so as to not be confused with actual



Mr. Brock D. Buche
DPU-Water Division, City of Fresno
Re: City of Fresno Metro WRM Plan DEIR
March 31, 2014
Page 2 of 4

water rights as issued by the State Water Resources Control Board. The current wording is incorrect and misleading. The City does not have water rights, but rather receives an allocation of water by contract or agreement from the actual water right holders.

↑
3-2
cont.

3. Page 2-1 In Section 2.2.2, the document states that the City has rights to Kings River water through FID. As noted above previously, the City receives an allocation of water by agreement. The agreement also excludes the allocation of stored water to the City. The second bullet should also be clarified that the City has a contract for an allocation of water from the San Joaquin River, not an actual water right.

3-3

4. Page 2-3 Table 2-2 states that the City would be entitled to 13,900 acre-feet of water from the U.S. Bureau of Reclamation (USBR) in a water year classification of "Critical-low". It should be noted that the 2014 water year is classified thus far as critical-low and the water allocation for Class 1 contractors is zero (0) percent with very little hope of getting any water.

3-4

5. Page 2-4 Section 2.2.3 summarizes the existing and future surface water supplies. While these estimates assume that the current agreements remain unchanged into the future, the possibility exists for changes or reductions to its water supplies.

3-5

6. Page 3-4 Section 3.4.1 provides an overview of the proposed projects. As previously noted above, the southwest SWTF needs significant discussion with FID to fully understand what may be needed or required and to see if it is even feasible. There may also be impacts that are unforeseen at this time that will need to be evaluated in the more detailed environmental impact analyses.

3-6

While the components of the SWTFs are fairly comprehensive, it is still unknown whether all of the facilities are included in this DEIR for the northeast and southeast SWTFs. The terms of the expansion must still be worked out and negotiated between the agencies.

7. Page 3-10 Section 3.4.2 assumes that the SWTF could be operated for 12 months if a raw water conveyance pipeline is used. While the potential for that is increased, it has not yet been determined whether the Fresno Canal can be operated for that length of time as the Fresno Canal and headworks will require substantial periodic maintenance.

3-7

Mr. Brock D. Buche
 DPU-Water Division, City of Fresno
 Re: City of Fresno Metro WRM Plan DEIR
 March 31, 2014
 Page 3 of 4

- 8. Page 3-15 The “On-Site Storage Facilities and Solids Drying Beds” paragraph provides for up to 19 MG of emergency raw water storage. This basin holds less than 6 hours of storage. The actual storage amount needed has not yet been fully determined and may require something greater. It is also not clear whether the basins can be filled entirely by gravity. FID requires a gravity system in case of electrical or equipment malfunctions. This requirement is applicable to both raw water conveyance options. 3-8

- 9. Page 3-25 The document does not describe whether the emergency spill basin(s) will be affected. It also cannot be discerned whether the basin(s) will be enlarged for the larger capacity. The current operations and issues at the site would indicate that larger facilities may be required to be constructed for the full flowrate. 3-9

- 10. Page 3-26 The Transmission System section describes the network of large diameter pipe to be installed to tie the City’s water distribution system together. FID’s existing conveyance facilities will be some of the largest that will need to be crossed. It should be recognized that FID’s system pre-dates most of the City’s water system and will need to retain senior right-of-way standing. 3-10

- 11. Page 4.2-8 It should be recognized that there will be significant impacts to FID’s operations and maintenance (O&M) due to longer delivery seasons to the City, greater flowrates to point locations, higher level of O&M, etc. While not fully identified or analyzed in the subject document, these will need to be discussed and fully mitigated during discussions and negotiations for conveyance requirements. 3-11

- 12. Page 4.4-22 The last paragraph describes how water that was previously used for agricultural purposes prior to parcels being annexed into the City will be reintroduced to those parcels. While this may be true for agricultural lands that were previously on water service, it is not true for parcels that were non-water service or did not use surface water. Those waters would now be new water into that area and result in a new reduction to the area outside of the City limits. 3-12

It is evident that the development of this plan has been a significant undertaking by the City. We applaud the City’s effort to develop this plan and memorialize the goals needed to be achieved in order for the City to responsibly plan growth. We are supportive of the City’s direction to balance the groundwater levels under the City’s sphere-of-influence and encourage the City to carefully, but vigorously implement a plan so that it can successfully achieve its goals without causing

Mr. Brock D. Buche
DPU-Water Division, City of Fresno
Re: City of Fresno Metro WRM Plan DEIR
March 31, 2014
Page 4 of 4

adverse impacts to other parties or parcels within the FID service area.

We appreciate the City's effort to undertake this task. We look forward to the City's consideration of our comments. Should you have any questions, please call me at (559) 233-7161 x-7103.

Sincerely,



Laurence Kimura
Assistant General Manager

cc: Martin Querin, Asst. Public Utilities Director, City of Fresno
Gary R. Serrato, Fresno Irrigation District
Bill Stretch, Fresno Irrigation District

H:\Fresno, City of\Fresno Metro WRMP Update-DEIR-comments-2014-0331.docx

Letter 3: Fresno Irrigation District

Response to Comment 3-1

The proposed SW SWTF is a future element of the proposed Metro Plan Update and a more detailed design will be developed prior to implementation of this facility. As described on page 3-34 and 3-25 of the Draft EIR, the SW SWTF was analyzed at a program level in the EIR and it will be subject to additional environmental analysis and documentation prior to construction.

Response to Comment 3-2

Comment noted. The use of the term “right” in Chapter 2 of the Draft EIR is intended to acknowledge the City obtains its water supplies through a variety of mechanisms, all of which are based on legal “rights” of multiple origins. The second paragraph on page 2-1 of the Draft EIR is revised to read as follows:

The City holds diversified rights to obtain both groundwater and surface water ~~and groundwater~~. The City holds rights to obtain surface water from the San Joaquin River through the United States Bureau of Reclamation’s (USBR) Central Valley Project Friant Division and Kings River water through the Fresno Irrigation District (FID). The City has long-established rights to pump groundwater from the regional (Kings) groundwater subbasin. The City also percolates and stores ~~recharges and banks~~ its treated municipal wastewater ~~in the groundwater basin~~ for subsequent extraction and reuse.

Response to Comment 3-3

See Response to Comment 3-2.

Response to Comment 3-4

Comment noted. Table 2-2 on page 2-3 of the Draft EIR provides a projected estimate of future Central Valley Project water supplies available to the City through its contract with the USBR, as specifically defined based on type of hydrologic year as provided in the September 13, 2006, “Stipulation of Settlement” that resolved *Natural Resources Defense Council, et al. v. Kirk Rodgers, et al.*, (United States District Court, Eastern District of California, No. CIV. S-88-1658-LKK/GGH). The actual amount of Central Valley Project water that will be available to the City will vary based on the hydrologic year type as defined in the Stipulation of Settlement and its implementation by the USBR.

Response to Comment 3-5

Comment noted. While the City has no plans to make changes or modifications to its water supply portfolio, the City does recognize that changes to future water supply may occur.

Response to Comment 3-6

See Response to Comment 3-1. Prior to the construction of any future project element analyzed at a program level, subsequent review will be completed by the City consistent with CEQA requirements.

Response to Comment 3-7

As described in subsection 3.4.2 on page 3-10 of the Draft EIR, one of the options being considered is a new intake/diversion and raw water conveyance pipeline to the proposed SE SWTF which could allow the treatment plant to be operated year-round (12 months of the year). The City has and will continue to hold discussions with FID to discuss whether FID's raw water conveyance facilities can be operated to support these proposed year-round operations.

Response to Comment 3-8

As described on page 3-15 of the Draft EIR, the City is proposing to install a 19 million gallon (mg) emergency raw water storage basin at the SE SWTF which is intended to only be used if the City opts to move forward with use of the Mill Ditch as the raw water conveyance facility to deliver water to the SE SWTF, and if an emergency situation were to occur when electrical or equipment malfunctions at the SE SWTF do not allow raw water to be treated/processed through the SE SWTF. The City has also initiated discussions with FID about the possibility of diverting flows upstream of the proposed SE SWTF to existing storage facilities during such an emergency situation, to provide additional emergency operational flexibility and system redundancy. The City has and will continue to hold discussions with FID regarding this matter.

Response to Comment 3-9

As currently envisioned by the City, the current capacity of the emergency spill basins would not be expanded as part of the planned buildout of the NE SWTF from 30 mgd to 60 mgd. However, the City will continue to meet with, discuss and coordinate with FID on this matter as additional, more specific details regarding the expansion plans for the NE SWTF are developed.

Response to Comment 3-10

The City is aware of the location of FID's existing conveyance facilities, particularly those that may have to be crossed by the City's proposed large diameter Regional Transmission Main (RTM) pipelines which are to be located within existing public right-of-ways. The City is currently evaluating and refining proposed RTM alignments, and issues such as potential utility conflicts will be considered in establishing the final alignments. As in all cases regarding the City's potential crossing of utilities (whether owned by FID or other agencies) the City will work with and coordinate with affected agencies to develop suitable utility crossing criteria. In addition, the incorporation of Mitigation Measure 4.10.6, which includes the preparation of a utility avoidance plan, would ensure that utility conflicts during implementation of the proposed project would be less than significant.

Response to Comment 3-11

The City recognizes that there is the possibility of potential impacts to FID's canal operations and maintenance due to the City's proposed SE SWTF and potential raw water conveyance system. The City has already initiated discussion with FID regarding this potential concern, and will continue to meet and discuss this issue with FID.

Response to Comment 3-12

As described on page 4.4-22, under Impact 4.4.3, the City's proposed water treatment facilities would only be treating those quantities of water that the City has legal access to. As further described, through the proposed project, the City intends to reinstate direct surface water use of approximately 72,000 af annually (full build out of the SE SWTF) for the benefit of former FID irrigated land now receiving City water service. The re-use of these surface water supplies within the City's Sphere of Influence (SOI), in combination with the additional enhanced groundwater recharge associated with the proposed project, are expected to have a net negligible effect on groundwater levels within the FID service area. With project completion, the groundwater gradient is expected to stabilize beneath the City thus reducing potential influences beyond its SOI. Therefore, implementation of the proposed project is not anticipated to reduce groundwater recharge potential or lower groundwater levels.

BAKMAN WATER COMPANY

TELEPHONE (559) 255-0324 • P.O. BOX 7965 • 5105 E. BELMONT • FRESNO, CA 93747

April 1, 2014

Mr. Brock D. Buche, PE, PLS, Project Manager
City of Fresno Department of Public Utilities, Water Division
1910 East University Avenue
Fresno, California 93703-2988

RE: Fresno Metropolitan Water Resources Management Plan Update
February 2014 Draft Environmental Impact Report, SCH# 2013091021
Comments from Bakman Water Company

Mr. Buche:

I am writing on behalf of Bakman Water Company ("Bakman") in response to the City of Fresno's (the "City") February 2014 Draft Environmental Impact Report (the "DEIR") for the Fresno Metropolitan Water Resources Management Plan Update (the "Plan"). Similar to Bakman's response to the Recycled Water Master Plan, it appears that the Plan could, and most likely will, impact Bakman and its customers. Specifically, Bakman is a Class "B" water utility that provides water service to a population of approximately 14,000 people in southeast Fresno. Bakman's California Public Utilities Commission authorized service area and territory boundary is defined in Bakman's Tariff Book as, "The area bounded by Olive Avenue, East Kings Canyon Road, Winery Avenue and Fowler Avenue, located approximately 1-1/2 miles east of Fresno and vicinity, Fresno County." Despite the fact that Bakman's authorized service area is within the area studied in the DEIR, the DEIR ignores Bakman and its 14,000 customers that will be undoubtedly impacted by the Plan.

4-1

Bakman has the following comments for the Plan's DEIR:

Bakman Service Area. The environmental baseline used in the DEIR is based on the non-existence of Bakman and its wells, distribution lines, and affected customers, as opposed to the conditions that existed at the time the NOP was issued or present conditions. While CEQA provides some *limited* flexibility, the baseline must include the "real conditions on the ground. . ." (*Save Our Peninsula Comm. v. Monterey County Board of Supers.* (2001) 87 Cal.App.4th 99, 125). Bakman serves 14,000 customers and pumps water from 11 active ground wells to

4-2



provide water service to its customers. Additionally, Bakman has installed infrastructure to service its customers, including distribution lines, water tanks, pumping stations, etc. Bakman would be more than willing to provide any and all information required regarding its operations to enable the lead agency to provide a clear picture of the existing conditions on the ground and to enable the lead agency to perform the required analyses.



Because the EIR “must focus on impacts to the existing environment, not hypothetical situations,” (*County of Amador v. El Dorado Counter Water Agency* (1999) 76 Cal.App.4th 931, 955), the DEIR should identify and describe Bakman, its operations and service area; explain how the Plan may affect the Bakman service area; and identify, analyze and mitigate the potential environmental effects of the Plan on Bakman and its customers, including, but not limited to, the effects on Bakman’s water quality and quantity. The DEIR should also describe any impacts associated with the installation of new infrastructure adjacent to Bakman’s territory boundaries and the cumulative impacts with any such work in and around Bakman’s system. Specific impacts that should be addressed include, but are not limited to, impacts associated with grading, disruption of service, water quality, and water supply.

4-2
cont.

Fresno irrigation District (“FID”) Contract. The language used for describing the terms of the City’s FID Agreement is conflicting and needs clarification. On page 2-4, Section 2.2.3 states, “As shown, the City’s projected future surface water supplies in normal years are expected to increase to 198,500 AFY by 2025 as the City’s supply from the FID Kings River increases (as agricultural areas within FID’s service area are annexed into the City).” However, on page 2-3, Section 2.2.2 states, “Unlike the City’s contract with FID, the entitlement the City has with the USBR is not tied to growth of the City’s water service area.” There is uncertainty whether the City’s Agreement with FID is tied to annexations or the water division’s service area. This affects Bakman because parts of our service area has been annexed to the City while other portions remain County islands.

4-3

Information on Water Transmission Lines. The City needs to make clear which Water Transmission Lines may traverse or border Bakman’s service area. Coordination must be had between Bakman and the City prior to any construction within its boundaries.

For example, page 3-9, Section 3.4.2 describes a westward line from the SE SWTF through McKinley or Belmont Avenue, with Belmont Avenue being through Bakman’s Service Area. Also, Water Transmission Lines are discussed going both East and West through Olive Avenue, which borders Bakman’s northern boundaries.

4-4

Bakman and the City will need to coordinate so as not to affect any current or future Bakman facilities or customers. Further, Bakman previously allowed the City to install a water transmission line along Clovis Avenue from Kings Canyon Road to the South and Olive Avenue to the North in order to close a gap in the City’s system. At that time, the City assured Bakman that this water transmission line would not be used to serve customers within the Bakman



service area. Just as Bakman received this past assurance from the City, Bakman would like assurance from the City that none of the Water Transmission Lines contemplated in the Plan will be used to serve current or future Bakman customers. Page 3-26 provides some assurance in this regard in stating, "No individual customer service taps on regional transmission system pipelines." Notwithstanding that fact, Bakman is entitled to the assurance that these lines will not be used to service, directly or indirectly, present customers in the Bakman service area, as such service would entitle Bakman to compensable damages from the City, as well as assurance that these lines will not be used to service other customers in the Bakman service area.

↑
4-4
cont.

Groundwater Impact. Bakman has worked with the City in the past in regards to the construction of new wells and the monitoring of the aquifer. For example, for the Fancher Creek development, Bakman agreed to utilize a 400,000 gallon storage tank as opposed to constructing a new well. Bakman also agreed to work with the City on well use scheduling if Bakman wells were to affect City wells and vice versa in its current eastern boundary. Bakman asks that the City extend the same courtesy, as the Plan proposes a number of new groundwater wells in the SEGA area just outside of Bakman's current service area. The impact of these groundwater wells on Bakman's existing wells must be analyzed as part of the environmental review of the Plan to determine the environmental impacts that such new wells will have on Bakman, its customers, and to Bakman's water quality and quantity of water pumped from its wells and to allow for adequate mitigation measures to be adopted to address these impacts.

4-5

Most importantly, Bakman's current operations, including well placement and production considerations, have a material effect on the Plan and must be analyzed with the Plan because much of the growth and construction is planned for the Southeast Fresno area. Bakman has met with the City on a number of different occasions to discuss how Bakman could be a part of the surface water treatment plant, planned to be built in southeast Fresno through bond acquisition. Despite this willingness to work with the City, the City has to date failed to present any concrete plan for Bakman's consideration. Unless these multi-million dollar bonds are to be funded through City water customers' utility rates with no financial encumbrances by any other City services, including sewer, then Bakman customers will inadvertently share in these costs and deserve the right to be participants in the City's projects that could not only be of benefit to them but for the smart water and aquifer management practices of the entire City and County.

4-6

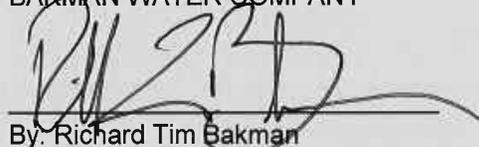
Although Bakman customers are represented by the jurisdictions of both City and County governments, the City's sphere of influence encompasses and drives most of the future water resource management that would affect them. A Private-Public-Partnership is not only an interesting proposition, but, if instituted properly, will set precedence for other communities and Cities to join in like considerations for better regional resource planning. With the acquisitions of many underserved and resource burdened service districts by privately owned utility companies, much to the benefit of the customers, the time has come to embrace the benefits that present

↓

themselves through cooperation and coordination by all jurisdictions involved. Bakman Water Company has and will continue to be a good neighbor to the City of Fresno's water system. By providing the information requested herein and allowing meaningful input and dialogue, that relationship can continue at the highest level.

↑
4-6
cont.

Best Regards,
BAKMAN WATER COMPANY



By: Richard Tim Bakman
Its: President

Letter 4: Bakman Water Company

Response to Comment 4-1

The Draft EIR prepared for the proposed Metro Plan Update took into account the City of Fresno SOI population including the water supply and demand assumptions of other public and private water purveyors in the SOI, including the Bakman Water Company. The Draft EIR addresses potential impacts of implementation of the Metro Plan Update. See also Responses to Comments 4-2 through 4-6.

Response to Comment 4-2

See response to comment 4-1. In addition, as stated on page 2-1 of the Draft EIR, the City of Fresno Water Division serves an estimated population of 514,000 (as of January 2013 – which is also the year the NOP was issued and the existing conditions used in the EIR analysis, updated as appropriate) located in the City limits. The Draft EIR does evaluate impacts of the proposed project on groundwater levels. As described on page 4.4-22 under Impact 4.4.3, the proposed project would increase groundwater recharge capacity through increased use of existing recharge facilities and construction and maintenance of new recharge facilities to allow for increased recharge in years when surplus surface water is available to help restore groundwater levels. Additionally, groundwater recharge could also be supplemented through the development of an Aquifer Storage and Recovery (ASR) Well System.

As discussed in Response to Comment 3-12, the re-use of these surface water supplies within the City's SOI, in combination with the additional enhanced groundwater recharge associated with the proposed project, are expected to have a net negligible effect on groundwater levels and the groundwater gradient is expected to stabilize beneath the City thus reducing potential influences beyond its SOI. Therefore, implementation of the proposed project is not anticipated to reduce groundwater recharge potential or lower groundwater levels.

Water quality impacts associated with the proposed project are discussed in Section 4-4 – Hydrology and Water Quality. Impact 4.4-1 on page 4.4-19 concludes that the proposed project would result in less than significant impacts related to sediment and construction equipment-related pollutants in storm water runoff. Impact 4.4.2 on page 4.4-21 concludes that the proposed project would result in less than significant water quality impacts due to increased pollutants in surface runoff and/or accidental release of chemicals stored at project facilities. Impact 4.4.6 on page 4.4-25 concludes that the proposed project would result in less than significant cumulative impacts related to surface and groundwater quality.

See also Response to Comment 3-10. The City is aware of the location of existing utilities, particularly those that may have to be crossed by the City's proposed RTM pipelines. As in all cases regarding the City's potential crossing of utilities or interference with existing wells, the City will work with and coordinate with Bakman Water Company (and other utility agencies) regarding wells that may be affected by project facilities. Coordination prior to construction will eliminate potential service disruptions and delays for wells and other infrastructure within proposed construction areas.

In addition, the incorporation of Mitigation Measure 4.10.6, which includes the preparation of a utility avoidance plan, would ensure that utility conflicts during implementation of the proposed project will be less than significant.

Response to Comment 4-3

The City's Water Division service area and the City's municipal boundaries are synonymous with respect to the City's rights to water from FID and the City's water service obligations. The City's agreement with FID requires FID to manage its Kings River water supplies in a specified manner based on the acres of land within FID's boundaries that are also annexed into the City's incorporated area. The City has a legal obligation to provide public water service to all customers within its municipal boundaries – its water service area. However, the City's water service obligation may be subject to adjustment in locations within the City where another water purveyor also provides water service, such as the Bakman Water Company or Pinedale County Water District. Whether or not portions of Bakman Water Company are within or outside the incorporated area of the City has no bearing on the City-FID water management arrangements.

Response to Comment 4-4

As discussed in Response to Comment 3-10, the City's RTM's are planned to be installed in public right-of-ways. The City will coordinate with Bakman Water Company, and all other utility providers, regarding potential and final RTM alignments, crossings, and possible utility conflicts, as the City proceeds through the design process. In addition, as stated on page 3-26 of the Draft EIR, these large diameter RTM City pipelines are being designed to allow for the broad, regional conveyance of treated potable water supplies from the City's water treatment facilities (in this particular case, from the SE SWTF).

Response to Comment 4-5

The wells noted in this comment are included as a future project element under the Metro Plan Update. See Table 3-11 on page 3-34 of the Draft EIR. As discussed in Responses to Comments 3-1 and 3-6, prior to the construction of any future project element analyzed at a program level in this Draft EIR, subsequent review will be completed by the City consistent with CEQA requirements.

Response to Comment 4-6

The estimated cost of implementing the proposed project will result in the adjustment of water rates and UGM fees, and will be limited to those rate payers who benefit from the proposed project.



FRESNO YOSEMITE
INTERNATIONAL AIRPORT

City of Fresno Airports Department

April 1, 2014

Mr. Brock Buche
Project Manager
City of Fresno
Department of Public Utilities
Water Division
1910 E. University Avenue
Fresno, CA 93703-2988

Subject: Comments on City of Fresno Metropolitan Water Resources
Management Plan Update Environmental Impact Report

Dear Mr. Buche:

The City of Fresno Airports Department (Airports) appreciates the opportunity to comment on the subject project EIR. Airports recognizes that this project is very critical to the sustainability of our water resources in the Fresno Metropolitan Area, which is needed to support the region's economic potential and the safety and security of its population. Like sustainable water resources, the ability of Fresno Yosemite International Airport (FAT) and Fresno Chandler Executive Airport (FCH) to remain sustainable air transportation assets to the region is also critical to its economic potential and the safety and security of its population.

The City of Fresno, as the Federal Aviation Administration (FAA) Sponsor for FAT and FCH is obligated to ensure that this project will be planned and developed compatibly with both airports so that the utility and viability of both the project and the airports will not be diminished. The DEIR comment letter submitted by Airports on September 20, 2013, identified issues which need to be considered and addressed in the EIR. Perhaps the most critical of those issues was to be sure that the potential of creating a wildlife attractant in a location which directly impacts the approach to FAT's primary runway, 29R, would be identified and eliminated as a possibility. Toward this end, our September 20, 2013, letter which is contained in the Appendix to the DEIR, stated in part the following:

Federal Aviation Administration (FAA) Advisory Circular 150/5200-33B
Hazardous Wildlife Attractants On or Near Airports (enclosed) details the types of hazards and location with respect to airport approach and departure airspace.

5-1



Mr. Brock Buche
Department of Public Utilities
Water Division
April 1, 2014
Page 2

The Advisory Circular recommends a five statute mile distance between the edge of the air operations area and any hazardous wildlife attractant. Hazardous wildlife attractants within this distance should be avoided, eliminated or mitigated. The proposed SE SWTP and recharge basins fall within this five mile perimeter and potentially pose a hazard to air navigation. These items must be completely addressed in the EIR.

In addition, it is recommended that the City file a FAA Form 7460-1 Notice of Proposed Construction or Alteration related to the SE SWTP and associated basins as soon as able. This will initiate an FAA evaluation of the projects as it relates to the safe navigation of aircraft. The results of this evaluation could significantly impact the projects. The Airports Department can assist with the filing if requested. The application can be made online at <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>.

The cited advisory circular was included with the September 20, 2013, letter which addresses wildlife hazards and the federal standards on avoiding impacts to navigable airspace near airports due to non-compatible land uses which attract wildlife. This advisory circular specifically identifies water treatment facilities as non-compatible land uses within five statute miles of an airport. The location of this project is well within five statute miles of FAT.

Also, the comment letter specifically recommended that FAA Form 7460-1 be filed with the FAA for review, as this would be the only way that FAA could evaluate any impacts of the project on the airport, as it provides the necessary information for review. Airports staff stands ready to assist in this process if so requested. Section 4 of the wildlife attractant advisory circular requires an airport operator to notify FAA of any planned or proposed land use changes which could create a wildlife hazard, using Form 7460-1.

It appears that while the impact of the project to FAT from objects creating obstructions to navigable airspace was addressed in the DEIR, the FAA Form 7460-1 has not yet been filed for FAA review. There was no mention in the DEIR of an evaluation of the project's potential to be a wildlife attractant impacting the airport. It is also recommended that a wildlife assessment be performed by an FAA approved wildlife biologist (as recommended in the advisory circular) and accompany the 7460-1 submission to the FAA. Absent this, it cannot be known whether a wildlife hazard will result from the project, nor what, if any measures should be taken to effectively mitigate such hazards, and most importantly, whether the FAA will determine that

↑
5-1
cont.
5-2
↓

Mr. Brock Buche
Department of Public Utilities
Water Division
April 1, 2014
Page 3

implementation of one or more of the projects would constitute a violation of their regulations regardless.

Implementation of any project that is not consistent with FAA regulations and grant assurances would result in a number of actions that could negatively impact FAT, FCH, and other lines of services that the City provides.

If additional information or clarification is necessary, please contact Dan Weber, Assistant Director of Aviation, at Daniel.Weber@Fresno.gov or at (559) 621-4525.

Sincerely,



Kevin R. Meikle
Director of Aviation

Enclosure

↑
5-2
cont.

Letter 5: Fresno Yosemite International Airport

Response to Comment 5-1

Impact 4.9.4 of the Draft EIR identifies and analyzes the impacts related to airport hazards. Mitigation Measures 4.9.4a and 4.9.4b on page 4.9-17 of the Draft address fully the associated mitigation such that the impacts related to airport hazards are less than significant. The reference in Mitigation Measure 4.5.4b to compliance with the Federal Aviation administration (FAA) Advisory Circular 150/520-33b is intended to include the filing of FAA Form 7460-1 at least 45 days before the start date of any construction activities associated with facilities of concern or the date of an application for a construction permit if filed, whichever is earlier. The City has initiated the process for submittal of Form 7460-1 for both the sludge lagoons/water storage basins and the antenna tower.

Response to Comment 5-2

See Response to Comment 5-1. The City has initiated filing of a Form 7460-1 to demonstrate compliance with FAA and the Fresno Yosemite International Airport Regulations, Plans, and Policies.

APPENDIX A

Mitigation Monitoring and Reporting Program

Public Resources Code Section 21081.6, subdivision (a)(1) requires lead agencies to, “adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation”. This Mitigation Monitoring and Reporting Program (MMRP) identifies mitigation measures adopted by the City of Fresno (City) from the Fresno Metropolitan Water Resources Management Plan Update (proposed project or Metro Plan) Environmental Impact Report (EIR); responsibility for implementation of the mitigation measures; actions taken to monitor and report on implementation; and timing of action. Mitigation measures are numbered consistent with the numbering included in the Metro Plan EIR (State Clearinghouse No. 2013091021), as updated by responses to comments included in the Metro Plan Final EIR.

The MMRP table includes the following:

Mitigation Measures – adopted mitigation measures from the Draft EIR.

Implementation and Reporting Responsibility – this column identifies who is responsible for implementing, enforcing and monitoring the actions described in the mitigation measures.

Monitoring and Reporting Actions – describes the actions taken to monitor and report implementation of the mitigation requirements.

Implementation Schedule – identifies the timing of implementation of the mitigation requirements.

Verification of Compliance – a column for the identification of the party responsible for monitoring implementation of the mitigation measures to note completion.

Abbreviations used in the MMRP include:

- Building and Safety Services – City of Fresno Development and Resources Management Building and Safety Services Division
- CDFW – California Department of Fish and Wildlife
- DARM – City of Fresno Development and Resources Management
- DPU – City of Fresno Department of Public Utilities
- Historic Preservation – DARM Historic Preservation Division

- DPW – City of Fresno Department of Public Works
- SJVAPCD – San Joaquin Valley Air Pollution Control District
- Traffic Engineering – DPW Traffic Engineering Division
- USFWS – United States Fish and Wildlife Service

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Geology and Soils				
Measure 4.3.1a (NT/F): The City shall prepare a site-specific soil and geotechnical engineering study prior to final design of individual projects under the Metro Plan Update. Each study shall be performed by a licensed professional including, but not limited to, a geologist, engineering geologist, certified soil scientist, certified agronomist, registered agricultural engineer, registered civil or structural engineer, and/or certified professional erosion and sediment control specialist with expertise in geotechnical engineering issues who is registered and/or certified in the State of California, to determine site specific impacts and to recommend site specific mitigations. The site-specific soil and geotechnical engineering studies shall be submitted to all appropriate State and local regulatory agencies including, but not limited to, City of Fresno's Building and Safety Services Division for review and approval. All feasible recommendations addressing potential seismic hazards and soil constraints shall be implemented.	Water Division	Building and Safety Services	Confirm that a site-specific soils and geotechnical engineering study is performed for individual projects by a licensed professional prior to final design approval. Confirm that the site specific soil and geotechnical are submitted to all appropriate State and local regulatory agencies. Confirm that all feasible recommendations addressing potential seismic hazards and soil constraints are implemented.	Prior to final design approval
Measure 4.3.1b (NT/F): All buildings shall conform to CBC standards for seismicity, engineered slope stability, and erosion control, as relevant.	Water Division	Building and Safety Services	Confirm that all buildings conform to the California Building Code standards for seismicity, engineered slope stability, and erosion control as relevant.	Prior to final design approval
Measure 4.3.1c (NT/F): All pipelines shall be designed and installed consistent with the guidelines published by the American Water Works Association.	Water Division	Building and Safety Services	Confirm that all pipelines are designed and installed consistent with American Water Works Association guidelines.	Prior to final design approval On-going: construction
Measure 4.3.2 (NT/F): Implement Mitigation Measure 4.3.1a.	See Mitigation Measure 4.3.1a	See Mitigation Measure 4.3.1a	See Mitigation Measure 4.3.1a	See Mitigation Measure 4.3.1a
Measure 4.3.3: Implement Mitigation Measure 4.3.1.	See Mitigation Measure 4.3.1	See Mitigation Measure 4.3.1	See Mitigation Measure 4.3.1	See Mitigation Measure 4.3.1
Biological Resources				
Measure 4.5.1a (NT/F): Pre-construction surveys for burrowing owls shall be conducted at any proposed project site containing suitable habitat by a qualified biologist [as approved by CDFW] within 30-days prior to the start of work activities where land construction is planned in known or suitable habitat for burrowing owls. If construction activities are delayed for more than 30 days after the initial preconstruction surveys, then a new preconstruction survey shall be required. All surveys shall be conducted in accordance with survey protocols from Appendix C and D of the <i>Staff Report on Burrowing Owl Mitigation</i> (CDFG, 2012).	Water Division	DARM CDFW	Confirm completion of pre-construction surveys for burrowing owls shall by a qualified biologist within 30-days prior to the start of work activities where land construction is planned in known or suitable habitat for burrowing owls. Confirm a new preconstruction survey is completed if construction activities are delayed for more than 30 days after the initial preconstruction surveys.	Prior to construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Biological Resources (cont.)				
<p>Measure 4.5.1b (NT/F): If burrowing owls are discovered in the proposed project site vicinity during construction, the onsite biologist shall be notified immediately. Occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFW 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.</p> <p>If this criteria is not met, occupied burrows during the nesting season will be avoided by establishment of a no-work buffer of 250-foot around the occupied/active burrow. Where maintenance of a 250-foot no-work buffer zone is not practical, the project applicant shall consult with the CDFW to determine appropriate avoidance measures. Burrows occupied during the breeding season (February 1 to August 31) will be closely monitored by the biologist until the young fledge/leave the nest. The onsite biologist shall have the authority to stop work if it is determined that construction related activities are disturbing the owls.</p> <p>If criterion 1 or 2 above are met and as approved by CDFW, the biologist shall undertake passive relocation techniques by installing one-way doors in active and suitable burrows allowing owls to escape but not re-enter. Owls should be excluded from the immediate impact zone and within a 160-foot buffer zone by having one-way doors placed over the entrance to prevent owls from inhabiting those burrows.</p> <p>Outside of the nesting season (August 31 through January 31st), passive relocation techniques shall take place. Construction activities may occur once a qualified biologist has deemed the burrows are unoccupied.</p>	Water Division	DARM Water Division CDFW	Confirm that the onsite biologist is notified immediately if burrowing owls are discovered in the proposed project site vicinity during construction. Confirm that occupied burrows are not disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFW 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.	On-going: construction
<p>Measure 4.5.1c (NT/F): Prior to initiating construction activities at any proposed project site containing suitable habitat, a qualified biologist shall conduct a pre-construction survey for horned lark, Swainson's hawk, raptors, and other protected and migratory bird species. The survey shall be conducted to identify any active nests located within the construction area or up to 0.5 mile from the construction area. In addition, all trees slated for removal shall be surveyed by a qualified biologist no more than 48-hours before removal to ensure that no nesting birds are occupying the tree. If possible, trees slated for removal shall be removed starting September 1st through the end of February, outside of the nesting season.</p>	Water Division	DARM Water Division CDFW	Confirm completion of pre-construction surveys by a qualified biologist. Confirm that if active nests are found during the survey that the appropriate mitigation measures are implemented, including a no-work buffer approved by CDFG. Confirm that the results of the survey are documented in a letter report that is distributed to CDFG and the City of Fresno.	Prior to construction On-going: construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Biological Resources (cont.)				
<p>If active nests are found during the survey, the applicant shall implement appropriate mitigation measures to ensure that the species will not be adversely affected, which will include establishing a no-work buffer zone as approved by California Department of Fish and Wildlife (CDFW), around the active nest. The no-work buffer may vary depending on species and site specific conditions as approved by CDFW. Appropriate mitigation measures include delaying construction activities until a qualified biologist determines that juveniles have fledged the nest(s), or establishing a “no construction” zone buffer around the nest.</p> <p>The results of the survey shall be documented in a letter report that is distributed to the CDFW and the City of Fresno. These measures shall ensure compliance with the Migratory Bird Treaty Act and Fish and Game Code 3503.5.</p>				
<p>Measure 4.5.2 (NT/F): Prior to initiating construction activities at any project site, a qualified biologist shall conduct a pre-construction survey for the presence of the valley elderberry longhorn beetle and its elderberry host plant in accordance with USFWS protocols. If elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level occur on or adjacent to the project site, or are otherwise located where they may be directly or indirectly affected by the proposed project, minimization and compensation measures, which include transplanting existing shrubs and planting replacement habitat (conservation plantings), are required (see below). Surveys are valid for a period of two years. Elderberry plants with no stems measuring 1.0 inch or greater in diameter at ground level are unlikely to be habitat for the beetle because of their small size and/or immaturity. Therefore, no minimization measures are required for removal of elderberry plants with all stems measuring 1.0 inch or less in diameter at ground level.</p> <p>For shrubs with stems measuring 1.0 inch or greater, the project proponent shall ensure that elderberry shrubs within 100 feet of proposed development be protected and/or compensated for in accordance with the <i>U.S. Fish and Wildlife Services’ (USFWS) Conservation Guidelines for the Valley Elderberry Longhorn Beetle</i> (USFWS, 1999a) and the <i>Programmatic Formal Consultation Permitting Projects with Relatively Small Effects on the Valley Elderberry Longhorn Beetle Within the Jurisdiction of the Sacramento Field Office</i> (USFWS, 1996).</p>	Water Division	DARM Water Division USFWS	Confirm completion of pre-construction surveys within 100 foot buffer by a qualified botanist/biologist. Confirm that elderberry shrubs within 100 feet of the proposed project activities shall conform to the following the <i>USFWS Conservation Guidelines for the Valley Elderberry Longhorn Beetle</i> . Confirm that compensatory mitigation is provided for any affected shrubs (shrubs within 100 feet of disturbance).	Prior to construction On-going: construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Biological Resources (cont.)				
<p>Measure 4.5.3 (NT/F): No more than two weeks prior to the commencement of ground-disturbing activities a qualified biologist shall perform surveys for western pond turtle within suitable aquatic and upland habitat on the project site. Surveys shall include western pond turtle nests as well as individuals. The biologist (with the appropriate agency permits or approvals) shall temporarily move any identified western pond turtles upstream of the construction site, and temporary barriers shall be placed around the construction site to prevent ingress.</p> <p>Construction shall not proceed until the work area is determined to be free of turtles and their nests. The biologist will be responsible for moving adult turtles that enter the construction zone after construction has begun. If a nest is located within a work area, the biologist [with the appropriate permits or approvals from the California Department of Fish and Wildlife (CDFW)] may move the eggs to a suitable facility for incubation, and release hatchlings into the original habitat in late fall. The biologist shall be present on the project site during initial ground clearing and grading and during all other construction activities adjacent to drainages with the potential to support western pond turtle.</p> <p>The results of these surveys shall be documented in a technical memorandum that shall be submitted to the CDFW (if turtles are documented) and/or the City.</p>	Water Division	DARM Water Division USFWS	Confirm that a qualified biologist conducts western pond turtle surveys within creeks and in other ponded areas affected by the project. Confirm that upland areas are also examined for evidence of nests as well as individual turtles. Confirm that construction shall not proceed until a reasonable effort has been made to capture and relocate as many western pond turtles as possible to minimize take. Confirm that if a nest is observed, a biologist with the appropriate permits and prior approval from CDFW shall move eggs to a suitable location or facility for incubation, and release hatchlings into the creek system the following autumn.	Prior to construction
<p>Measure 4.5.4a (NT/F): To ensure that impacts to the San Joaquin kit fox and its habitat are avoided or reduced, the following measures shall be implemented:</p> <p>Preconstruction surveys for the San Joaquin kit fox shall be conducted no less than two calendar weeks and no more than thirty calendar days prior to commencement of ground disturbance. Surveys shall be conducted by qualified biologists. When surveys identify potential dens (defined as burrows at least four inches in diameter which open up within two feet), potential den entrances shall be dusted for three calendar days to register and track activity of any San Joaquin kit fox present. If no San Joaquin kit fox activity is identified, the den may be destroyed.</p> <p>If San Joaquin kit fox activity is identified, then dens shall be monitored for at least five consecutive days from the time of observation to determine if occupation is by an adult fox only or is a natal den (natal dens usually have multiple openings). If the den is occupied by an adult only, it may be destroyed when the adult fox has moved or is temporarily absent.</p>	Water Division	DARM USFWS	Confirm that preconstruction surveys for the San Joaquin kit fox are conducted by a qualified biologist no less than two calendar weeks and no more than thirty calendar days prior to commencement of ground disturbance. Confirm that when surveys identify potential dens, potential den entrances are dusted for three calendar days to register and track activity of any San Joaquin kit fox present. Confirm that if San Joaquin kit fox activity is identified that dens are monitored for at least five consecutive days from the time of observation to determine if occupation is by an adult fox only or is a natal den. Confirm that If the den is a natal den, a buffer zone of 250 feet is maintained around the den as approved by the USFWS. Confirm that the buffer zone is maintained until the biologist determines that the den has been vacated. Confirm that is and where San Joaquin kit fox are identified, the provisions of the USFWS's published	Prior to construction On-going: construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Biological Resources (cont.)				
<p>If the den is a natal den, a buffer zone of 250 feet shall be maintained around the den and as approved by the USFWS. This buffer zone will be maintained until the biologist determines that the den has been vacated. Where San Joaquin kit fox are identified, the provisions of the U.S. Fish and Wildlife Service’s published <i>Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance</i> (USFWS, 199b) shall apply (except that preconstruction survey protocols shall remain as established in this paragraph). These standards include provisions for educating construction workers regarding the kit fox, keeping heavy equipment operating at safe speeds, checking construction pipes for kit fox occupation during construction and similar low or no-cost activities.</p>			<p><i>Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance</i> apply (except that preconstruction survey protocols shall remain as established in this paragraph).</p>	
<p>Measure 4.5.4b (NT/F): All excavated, steep-walled holes or trenches more than two feet deep shall be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth-full or wooden planks.</p>	Contractor	Building and Safety Services	Confirm that all excavated, steep-walled holes or trenches more than two feet deep are covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth-full or wooden planks.	On-going; construction
<p>Measure 4.5.5 (NT/F): To ensure that impacts to the American badger and their habitat are avoided or reduced, the following measures shall be implemented:</p> <ul style="list-style-type: none"> A qualified biologist shall conduct a training session for all construction personnel focused on the protection and conservation of protected, non-listed special-status wildlife species, including American badgers. At a minimum, the training shall include a species and habitat description for the American badger (in addition to other non-listed special-status species). The training session shall identify the general measures that are being implemented to minimize impacts on these species as they relate to the project, and the boundaries within which the project could be accomplished. Concurrent with other required surveys, during winter/spring months before new project activities, and concurrent with other preconstruction surveys (e.g., kit fox and burrowing owl), a qualified biologist shall perform a pre-activity survey to identify the presence of American badgers. If this species is not found, no further mitigation shall be required. If badgers are identified, they shall be passively relocated using burrow exclusion (e.g., installing one-way doors on burrows) or similar CDFW-approved exclusion methods. In unique situations it might be necessary to actively relocate badgers (e.g., using live traps) to protect individuals from potentially harmful situations. Such relocation could be performed with 	Water Division Contractor	DARM CDFW USFWS	Confirm that a qualified biologist conducts a training session for all construction personnel. Confirm that a qualified biologist performs a pre-activity survey during winter/spring months before new project activities, and concurrent with other preconstruction surveys to identify the presence of American badgers. Confirm that if badgers are identified, they shall be passively relocated using burrow exclusion or similar CDFW-approved exclusion methods. Confirm that when unoccupied dens are encountered outside of work areas but within 100 feet of proposed activities, vacated dens are inspected to ensure they are empty and temporarily covered using plywood sheets or similar materials. Confirm that if badger occupancy is determined at a given site within the work area, the construction manager is informed that work should be halted. Confirm that, depending on the den type, reasonable and prudent measures to avoid harming badgers are implemented. Confirm that project-related vehicles observe a maximum 20 miles per hour speed limit on private roads. Confirm that all excavated holes or trenches greater than 2 feet deep are covered at the end of each work day by suitable materials, or escape routes constructed of	Prior to construction On-going; construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Biological Resources (cont.)				
<p>advance CDFW coordination and concurrence. When unoccupied dens are encountered outside of work areas but within 100 feet of proposed activities, vacated dens shall be inspected to ensure they are empty and temporarily covered using plywood sheets or similar materials.</p> <ul style="list-style-type: none"> If badger occupancy is determined at a given site within the work area, the construction manager should be informed that work should be halted. Depending on the den type, reasonable and prudent measures to avoid harming badgers will be implemented and may include seasonal limitations on project construction near the site (i.e., restricting the construction period to avoid spring-summer pupping season), and/or establishing a construction exclusion zone around the identified site, or resurveying the den a week later to determine species presence or absence. To minimize the possibility of inadvertent badger mortality, project-related vehicles shall observe a maximum 20 miles per hour speed limit on private roads. To prevent accidental entrapment of badgers or other animals during construction, all excavated holes or trenches greater than 2 feet deep shall be covered at the end of each work day by suitable materials, or escape routes constructed of earthen materials or wooden planks shall be provided. Before filling, such holes shall be thoroughly inspected for trapped animals. All food-related trash items (such as wrappers, cans, bottles, and food scraps) shall be disposed of in closed containers and removed daily from the project area. <p>To prevent harassment and mortality of badgers or destruction of their dens, no pets shall be allowed in the project area.</p>			<p>earthen materials or wooden planks shall be provided. Confirm that before filling, such holes are thoroughly inspected for trapped animals. Confirm that no pets are allowed in the project area.</p>	
<p>Measure 4.5.6 (NT/F): To ensure that impacts to the special-status bat species and their habitat are avoided or reduced, the following measures shall be implemented:</p> <ul style="list-style-type: none"> Before construction activities (i.e., ground clearing and grading, including trees removal) within 200 feet of trees that could support special-status bats, a qualified bat biologist shall survey for special-status bats. If no evidence of bats (i.e., direct observation, guano, staining, or strong odors) is observed, no further mitigation shall be required. If evidence of bats is observed, the City of Fresno and its contractors shall implement the following measures to avoid potential impacts on breeding populations: 	<p>Water Division Contractor</p>	<p>DARM CDFW USFWS</p>	<p>Confirm that a qualified bat biologist conducts a survey for special-status bats before construction activities within 200 feet of trees that could support special-status bats. Confirm that if evidence of bats is observed a no-disturbance buffer of 250-feet shall be created around active bat roosts during the breeding season (April 15 through August 15). Confirm that the removal of trees showing evidence of active bat activity occurs during the period least likely to affect bats, as determined by a qualified bat biologist. Confirm that if the exclusion of bats from potential roost sites is necessary to prevent indirect</p>	<p>Prior to construction On-going: construction</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Biological Resources (cont.)				
<ul style="list-style-type: none"> - A no-disturbance buffer of 250-feet shall be created around active bat roosts during the breeding season (April 15 through August 15). Bat roosts initiated during construction are presumed to be unaffected by the indirect effects of noise and construction disturbances. However, the direct take of individuals will be prohibited. - Removal of trees showing evidence of active bat activity shall occur during the period least likely to affect bats, as determined by a qualified bat biologist (generally between February 15 and October 15 for winter hibernacula, and between August 15 and April 15 for maternity roosts). If the exclusion of bats from potential roost sites is necessary to prevent indirect impacts due to construction noise and adjacent human activity, bat exclusion activities (e.g., installation of netting to block roost entrances) shall also be conducted during these periods. 			impacts due to construction noise and human activity adjacent, bat exclusion activities are also conducted during these periods.	
<p>Measure 4.5.7a (NT/F): Prior to construction, vegetated portions of the project site, including wetland habitats, shall be surveyed by a qualified botanist for the California satintail, San Joaquin adobe sunburst, Sandford's arrowhead, and other special-status plant species with the potential to occur in the project area. The survey(s) shall be conducted in accordance with established CDFW Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities (CDFG, 2009), which calls for protocol-level surveys during the appropriate flowering/identification period for the species.</p>	Water Division Contractor	DARM CDFW USFWS	Confirm that prior to initiating any phase of the proposed project, pre-construction surveys for special-status plant species shall be performed by a qualified botanist during the appropriate season (between February and October) for identification, according to CDFW guidelines for rare plant surveys as updated, within suitable habitat in the Proposed project area prior to construction. Confirm that two surveys for special-status plant species that have the potential to occur within the project site are conducted during the period of February through October.	Prior to construction On-going: construction
<p>Measure 4.5.7b (NT/F): The following measures shall be implemented to compensate for the loss of special-status or rare plants identified on the project site:</p> <ul style="list-style-type: none"> • Avoid existing, known populations where possible; • Minimize impacts by restricting removal of plants to a few individuals of a population where possible; • Prepare a Mitigation and Monitoring Plan to relocate plants and/or seed banks or reintroduce new populations in suitable habitat and soil types within the on-site Preserve or at a CDFW or USFWS-approved off-site location; • To the extent feasible/practical, restore project site locations that supported rare or special-status plants to its original condition. 	Water Division	DARM	Confirm that if special-status plant species are found during these surveys, the City will propose and implement avoidance, minimization, and/or avoidance measures to CDFW for their approval.	On-going: construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Biological Resources (cont.)				
<p>Measure 4.5.8 (NT/F): In order to protect and preserve wetland habitats within the proposed project area, the following measures shall be implemented:</p> <ul style="list-style-type: none"> • Prior to construction, a jurisdictional wetland delineation shall be prepared for verification by the Corps to determine the location and extent of waters of the U.S. and wetlands on and near Project Elements. Following the verification, if jurisdictional wetlands will be impacted, a Section 404 permit application shall be prepared and submitted to the Corps. • The no net loss of wetland habitat and no significant impacts to potential jurisdictional features policy shall be complied with through compensation for the unavoidable loss of wetlands at a ratio no less than 1:1. Compensation shall take the form of wetland preservation or creation in accordance with Corps and CDFW mitigation requirements, as required under project permits. Preservation and creation may occur onsite through a conservation agreement or offsite through purchasing credits at a Corps approved mitigation bank. • In addition, the RWQCB regulates these features under Section 401 of the CWA; the City shall also apply for a Section 401 Water Quality Certification from the RWQCB prior to discharging fill in these features. Irrigation canals and potential wetlands within the proposed project area may be considered waters of the U.S. and fall under the jurisdictional purview of the Corps and/or RWQCB per Sections 401 and 404 of the CWA. 	Water Division	DARM	Confirm that prior to construction a jurisdictional wetland delineation be prepared for verification by the Corps. Confirm that the no net loss of wetland habitat and no significant impacts to potential jurisdictional features policy is complied. Confirm that compensation shall take the form of wetland preservation or creation in accordance with Corps and CDFW mitigation requirements, as required under project permits. Confirm the application for a Section 401 Water Quality Certification from the RWQCB prior to discharging fill in these features.	Prior to construction
<p>Measure 4.5.9a (NT/F): Sensitive tree resources adjacent to construction activities may require additional protection. The following measures shall protect trees to be retained onsite during construction of the proposed project:</p> <ul style="list-style-type: none"> • A Tree Protection Zone (TPZ) shall be established around any tree or group of trees to be retained. The formula typically used is defined as 1.5 times the radius of the dripline or 5 feet from the edge of any grading, whichever is greater. The TPZ may be adjusted on a case-by-case basis after consultation with a certified arborist. • The TPZ of any protected trees shall be marked with permanent fencing (e.g., post and wire or equivalent), which shall remain in place for the duration of construction activities in the area. Post “keep out” signs on all sides of fencing. 	Water Division Contractor	DARM	Confirm that prior to and during construction, sensitive tree resources adjacent to construction areas are identified and appropriate mitigation measures are implemented during construction for their protection consistent with TPZ requirements.	Prior to construction On-going: construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Biological Resources (cont.)				
<ul style="list-style-type: none"> • Construction-related activities, including grading, trenching, construction, demolition, or other work shall be prohibited within the TPZ. No heavy equipment or machinery shall be operated within the TPZ. No construction materials, equipment, machinery, or other supplies shall be stored within a TPZ. No wires or signs shall be attached to any tree. Any modifications must be approved and monitored by a certified arborist. • Prune selected trees to provide necessary clearance during construction and to remove any defective limbs or other parts that may pose a failure risk. All pruning shall be completed by a certified arborist or tree worker and adhere to the Tree Pruning Guidelines of the International Society of Arboriculture. • The TPZs of protected trees shall be monitored on a weekly basis. • A certified arborist shall monitor the health and condition of the protected trees and, if necessary, recommend additional mitigations and appropriate actions. This shall include the monitoring of trees adjacent to project facilities in order to determine if construction activities (including the removal of nearby trees) would affect protected trees in the future. • Provide supplemental irrigation and other care, such as mulch and fertilizer, as deemed necessary by a certified arborist. Any injuries shall be treated by a certified arborist. 				
Measure 4.5.9b (NT/F): The City shall comply with the Fresno Municipal Code (F.M.C. 11-305) if protected street trees are proposed for removal.	Water Division	DARM	Confirm compliance with the Fresno Municipal Code 11-305.	Prior to construction On-going: construction
Measure 4.5.10 (NT/F): In order to protect and preserve riparian habitats and/or lake or streambeds within the proposed project area, the following measures shall be implemented: The City of Fresno shall obtain a Section 1602 Streambed Alteration Agreement prior to implementing any action that may alter a stream or lake within the jurisdictional limits of CDFW (typically the top of bank or edge of riparian habitat, whichever is greater).	Water Division	DARM	Confirm the City obtains a Section 1602 Streambed Alteration Agreement prior to implementing any action that may alter a stream or lake within the jurisdictional limits of CDFW.	Prior to construction
Measure 4.5.11 (NT): Implement Mitigation Measures 4.5.8, 4.5.9, and 4.5.10.	See Mitigation Measures 4.5.8, 4.5.9, and 4.5.10	See Mitigation Measures 4.5.8, 4.5.9, and 4.5.10	See Mitigation Measures 4.5.8, 4.5.9, and 4.5.10	See Mitigation Measures 4.5.8, 4.5.9, and 4.5.10
Measure 4.5.10 (NT/F): Implement Measures 4.5.1 through 4.5.11.	See Mitigation Measures 4.5.1 through 4.5.11	See Mitigation Measures 4.5.1 through 4.5.11	See Mitigation Measures 4.5.1 through 4.5.11	See Mitigation Measures 4.5.1 through 4.5.11

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Transportation and Traffic				
<p>Measure 4.6.1a (NT/F): Prior to construction, the City of Fresno and its contractor(s) shall coordinate with the appropriate local government departments, and with utility districts and agencies regarding the timing of construction projects that would occur near project sites. Specific measures to mitigate potential significant impacts would be determined as part of the interagency coordination, and could include measures such as employing flaggers during key construction periods, designating alternate haul routes, and providing more outreach and community noticing.</p>	<p>Water Division Contractor</p>	<p>DARM Traffic Engineering</p>	<p>Confirm that prior to construction the City of Fresno and its contractor(s) coordinate with the appropriate local government departments, utility districts, and agencies. Confirm the determination of specific mitigation measures through interagency coordination as necessary to mitigate potential significant impacts.</p>	<p>Prior to construction</p>
<p>Measure 4.6.1b (NT/F): The following requirements shall be incorporated into contract specifications prepared by the City for the project:</p> <ul style="list-style-type: none"> • The contractor(s) will obtain any necessary road encroachment permits prior to construction and will comply with conditions of approval attached to project implementation. As part of the road encroachment permit process, the contractor(s) will submit a traffic safety / traffic management plan (for work in the public right-of-way) to the agencies having jurisdiction over the affected roads. Elements of the plan will likely include, but are not necessarily limited to, the following: • Develop circulation and detour plans to minimize impacts to local street circulation. Use haul routes minimizing truck traffic on local roadways to the extent possible. Use flaggers and/or signage to guide vehicles through and/or around the construction zone. • Control and monitor construction vehicle movements through the enforcement of standard construction specifications by periodic onsite inspections. • To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule truck trips outside of peak morning and evening commute hours. • Limit lane closures during peak hours to the extent possible. Delays would also be experienced by drivers during off-peak hours, but because of the lower volume, fewer people would be affected by the delays during those periods. Restore roads and streets to normal operation by covering trenches with steel plates outside of allowed working hours or when work is not in progress. • Limit, where possible, the pipeline construction work zone to a width that, at a minimum, maintains alternate one-way traffic flow past the construction zone. Parking may be prohibited if 	<p>Water Division Contractors</p>	<p>DARM Traffic Engineering</p>	<p>Confirm the obtainment of any necessary road encroachment permits. Confirm the development and implementation of a traffic safety/traffic management plan for.</p>	<p>Prior to construction</p>

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Transportation and Traffic (cont.)				
<p>necessary to facilitate construction activities or traffic movement. If the work zone width will not allow a 10-foot-wide paved travel lane, then the road will be closed to through-traffic (except emergency vehicles) and detour signing on alternative access streets will be used.</p> <ul style="list-style-type: none"> • Include signage to direct pedestrians and bicyclists around project construction work zones that displace sidewalks and/or bike lanes. • Store all equipment and materials in designated contractor staging areas on or adjacent to the worksite, in such a manner to minimize obstruction to traffic. • Comply with roadside safety protocols. Provide “Road Work Ahead” warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone. • Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. Provide advance notification to the facility owner or operator of the timing, location, and duration of construction activities and the locations of detours and lane closures. • Coordinate construction activities, to extent possible, to minimize traffic disturbances adjacent to schools (e.g., do work during summer months when there is less activity at schools). For construction activities that occur during the school year, then at the start and end of the school day at schools adjacent to a pipeline project, the contractor(s) will provide flaggers in the school areas to ensure traffic and pedestrian safety. • Coordinate with the Fresno Area Express so the transit provider can temporarily relocate bus routes or bus stops in work zones as it deems necessary. • To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule construction of project elements to avoid overlapping maximum trip-generation construction phases. 				
Measure 4.6.2: Implement Mitigation Measure 4.6.1.	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1
Measure 4.6.3: Implement Mitigation Measure 4.6.1.	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Transportation and Traffic (cont.)				
Measure 4.6.4: Implement Mitigation Measure 4.6.1.	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1
<p>Measure 4.6.5 (NT): Prior to occupancy of the relocated Water Division Corporation Yard and Administrative uses at the SE SWTF the intersection of Fowler and Olive Avenues shall be signalized in accordance with City of Fresno standards including protected left-turn phasing and the following minimum lane configurations:</p> <ul style="list-style-type: none"> • Eastbound: one left-turn lane and a shared through/right-turn lane • Westbound: two left-turn lanes and a shared through/right-turn lane • Northbound: one left-turn lane and a shared through/right-turn lane • Southbound: one left-turn lane and a shared through/right-turn lane <p>To receive the two-left hand turn lanes west bound, a second southbound lane would be required south of Olive Avenue to tie into the existing portion of Fowler that has already been built</p> <p>With implementation of this mitigation the intersection will operate at LOS C and 95th percentile queues in the left-turn and right-turn lanes will be 219 feet or less. Therefore, standard City of Fresno turn lanes are recommended with the exception of the westbound dual left-turn lanes, which should provide storage length of at least 319 feet.</p>	Water Division	DARM Traffic Engineering	Confirm that the required intersections and roadway segments have been signalized and widened, as applicable, in accordance with City of Fresno Standards.	Prior to occupancy of the relocated Water Division Corporation Yard and Administrative Uses
Measure 4.6.8 (NT/F): Implement Mitigation Measure 4.6.1.	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1	See Mitigation Measure 4.6.1
Air Quality and Climate Change				
<p>Measure 4.7.1a (NT/F): The City of Fresno shall comply with Regulation VIII Rule 8011 and implement the following dust control measures during all future project construction:</p> <ul style="list-style-type: none"> • The City of Fresno shall submit a Dust Control Plan subject to review and approval of the San Joaquin Valley Air Pollution Control District (SJVAPCD) at least 30 days prior to the start of any construction activity on a site that includes 40 acres or more of disturbed surface area. <p>Specific control measures for construction, excavation, extraction, and other earthmoving activities required by the SJVAPCD include:</p> <ul style="list-style-type: none"> • All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical 	Water Division Contractor	Building and Safety Services SJVAPCD	Confirm compliance with Regulation VIII Rule 8011 and submit a Dust Control Plan subject to review and approval of the SJVAPCD at least 30 days prior to the start of any construction activity on a site that includes 40 acres or more of disturbed surface area. Confirm the implementation of specific control measures for construction, excavation, extraction, and other earthmoving activities as required by the SJVAPCD. Confirm the implementation of enhanced and additional control measures for construction emissions of PM ₁₀ where feasible.	Prior to construction Ongoing: construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Air Quality and Climate Change (cont.)				
<p>stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover in order to comply with Regulation VIII's 20 percent opacity limitation.</p> <ul style="list-style-type: none"> • All onsite unpaved roads and offsite unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. • All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water (at least two times per day) or by presoaking. • When materials are transported offsite, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. • All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. However, the use of blower devices is expressly forbidden, and the use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. • Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. • Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday. • Any site with 150 or more vehicle trips per day shall prevent carryout and trackout. <p>Enhanced and additional control measures for construction emissions of PM10 shall be implemented where feasible. These measures include:</p> <ul style="list-style-type: none"> • Limit traffic speeds on unpaved roads to 15 miles per hour (mph). • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. 				

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Air Quality and Climate Change (cont.)				
<ul style="list-style-type: none"> • Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. • Install wind breaks at windward side(s) of construction areas. • Suspend excavation and grading activity when winds exceed 20 mph. • Limit area subject to excavation, grading, and other construction activity at any one time. 				
<p>Measure 4.7.1b: Implementation Plans prepared by the City of Fresno for this project shall comply with Rule 9510 Indirect Source Review. Compliance with Rule 9510 would require reductions of 20% of the nitrogen oxide (NO_x) construction emissions and 45% of the PM₁₀ construction exhaust emissions. If these emission reductions are not met, then the City of Fresno shall pay the required mitigation fees by the SJVAPCD.</p>	Water Division Contractor	Building and Safety Services	Confirm that Implementation Plans prepared by the City comply with Rule 9510 Indirect Source Review. Confirm reductions of 20% of the nitrogen oxide (NO _x) construction emissions and 45% of the PM ₁₀ construction exhaust emissions or payment of the required mitigation fees if the emissions reductions are not met.	Prior to construction
<p>Measure 4.7.1c: Off-road construction equipment used on site shall achieve fleet average emissions equal to or less than the Tier II emissions standard of 4.8 NO_x grams per horsepower per hour (g/hp-hr).</p>	Water Division Contractor	Building and Safety Services	Confirm that off-road construction equipment used on site achieves fleet average emissions equal to or less than the Tier II emissions standard.	Ongoing: construction
<p>Measure 4.7.6: Implement Mitigation Measure 4.7.1.</p>	See Mitigation Measure 4.7.1	See Mitigation Measure 4.7.1	See Mitigation Measure 4.7.1	See Mitigation Measure 4.7.1
Noise				
<p>Measure 4.8.1 (NT/F): The City and its contractors shall implement the following mitigation measures when project-related construction in the City is planned to occur within 1,500 feet of sensitive receptors:</p> <ul style="list-style-type: none"> • Sensitive receptors (residences, residential areas, schools, and hospitals) within 1,500 feet of project construction activities shall be identified and mapped, and this information shall be used to minimize noise impacts to sensitive receptors. • Construction activities shall meet municipal code requirements related to noise. Construction activities shall be limited to between 7 a.m. and 6 p.m. Monday through Saturday to avoid noise-sensitive hours of the day. Construction activities shall be prohibited on Sundays and holidays. • Construction equipment noise shall be minimized by muffling and shielding intakes and exhaust on construction equipment (per the manufacturer's specifications) and by shrouding or shielding impact tools. 	Water Division Contractor	Building and Safety Services	Confirm that sensitive receptors within 1,500 feet of project construction activities shall be identified and mapped, and this information shall be used to minimize noise impacts to sensitive receptors. Confirm that construction activities meet municipal code requirements related to noise. Confirm construction equipment noise is minimized. Confirm that construction contractors locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from nearby sensitive receptors. Confirm that if construction were to occur near a school, the construction contractor coordinates with the most noise producing construction activities with school administration in order to limit disturbance to the campus.	Prior to construction On-going: construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Noise (cont.)				
<ul style="list-style-type: none"> Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. External jackets on the tools themselves shall be used where feasible. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible. Construction contractors shall locate fixed construction equipment (such as compressors and generators) and construction staging areas as far as possible from nearby sensitive receptors including residences, schools, and hospitals. If construction were to occur near a school, the construction contractor shall coordinate with the most noise producing construction activities with school administration in order to limit disturbance to the campus. Signs shall be posted at construction sites that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number in the event of problems. An onsite complaint and enforcement manager shall respond to and track complaints and questions related to noise. 				
<p>Measure 4.8.2 (NT/F): The City and its contractors shall implement the following measures when project-related construction is planned to occur within the City limits and/or within 1,500 feet of sensitive receptors:</p> <ul style="list-style-type: none"> Sensitive receptors (residences, residential areas, schools, and hospitals) within 1,500 feet of project construction activities shall be identified and mapped, and this information shall be used to minimize ground-borne vibration and ground-borne noise impacts to sensitive receptors. Limit jack and bore drilling to 45 feet from sensitive receptors and 15 feet from any structures. If jack and bore drilling must occur within 15 feet of any structure, the construction contractor shall conduct crack surveys before drilling to prevent potential architectural damage to nearby structures. The surveys shall be done by photographs, video tape, or visual inventory, and shall include inside as well as outside locations. All existing cracks in walls, floors, and 	Water Division Contractor	Building and Safety Services	Confirm that sensitive receptors (residences, residential areas, schools, and hospitals) within 1,500 feet of project construction activities are identified and mapped, and this information is used to minimize ground-borne vibration and ground-borne noise impacts to sensitive receptors. Confirm that jack and bore drilling is limited to 45 feet from sensitive receptors and 15 feet from any structures. Confirm that if jack and bore drilling must occur within 15 feet of any structure, the construction contractor shall conduct crack surveys before and after drilling to prevent potential architectural damage to nearby structures. Confirm that the surveys are done by photographs, video tape, or visual inventory, and shall include inside as well as outside locations.	Prior to construction On-going: construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Noise (cont.)				
driveways shall be documented with sufficient detail for comparison after construction to determine whether actual vibration damage occurred. A post-construction survey shall be conducted to document the condition of the surrounding buildings after the construction is complete.				
Measure 4.8.5 (NT/F): Implement Mitigation Measures 4.8.1 and 4.8.2.	See Mitigation Measures 4.8.1 and 4.8.2	See Mitigation Measures 4.8.1 and 4.8.2	See Mitigation Measures 4.8.1 and 4.8.2	See Mitigation Measures 4.8.1 and 4.8.2
Hazards and Hazardous Materials				
Measure 4.9.1a (NT/F): Prior to final project design and any earth disturbing activities, the City shall conduct a Phase I Site Assessment. The Phase I Site Assessment shall be prepared by a Registered Environmental Assessor (REA) or other qualified professional to assess the potential for contaminated soil or groundwater conditions at the project site. The Phase I Site Assessment shall include a review of appropriate federal and State hazardous materials databases, as well as relevant local hazardous material site databases for hazardous waste on-site and off-site locations within a one quarter mile radius of the project site. The Phase I Site Assessment shall also include a review of existing or past land uses and aerial photographs, summary of results of reconnaissance site visit(s), and review of other relevant existing information that could identify the potential existence of contaminated soil or groundwater. If no contaminated soil or groundwater is identified or if the Phase I Site Assessment does not recommend any further investigation then the City shall proceed with final project design and construction.	Water Division	Building and Safety Services	Confirm the completion of a Phase I Site Assessment by a Registered Environmental Assessor prior to final project design and any earth disturbing activities.	Prior to final design approval
Measure 4.9.1b (NT/F): If existing soil or groundwater contamination is identified and if the Phase 1 Site Assessment recommends further review, the City shall retain a REA to conduct follow-up sampling to characterize the contamination and to identify any required remediation that shall be conducted consistent with applicable regulations prior to any earth disturbing activities. The environmental professional shall prepare a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations at the proposed construction site, and recommendations for appropriate handling of any contaminated materials during construction.	Water Division	Building and Safety Services	Confirm that if existing soil or groundwater contamination is identified and if the Phase 1 Site Assessment recommends further review that a is retained to conduct follow-up sampling to characterize the contamination and to identify any required remediation that shall be conducted consistent with applicable regulations prior to any earth disturbing activities. Confirm that the REA prepares a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations at the proposed construction site, and recommendations for appropriate handling of any contaminated materials during construction.	Prior to construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Hazards and Hazardous Materials (cont.)				
Measure 4.9.1c (NT/F): If unidentified or suspected contaminated soil or groundwater is encountered during construction activities, work shall be halted in the area of potential exposure, and the type and extent of contamination shall be identified by a REA. The environmental professional shall prepare a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations at the proposed construction site, and recommendations for appropriate handling of any contaminated materials during construction.	Water Division Contractor	Building and Safety Services	Confirm that if unidentified or suspected contaminated soil or groundwater is encountered during construction activities, work shall be halted in the area of potential exposure, and the type and extent of contamination shall be identified by a REA. Confirm that the REA prepares a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations at the proposed construction site, and recommendations for appropriate handling of any contaminated materials during construction.	Ongoing: construction
Measure 4.9.1d (NT/F): Groundwater recharge basins shall not be located within an area that is listed as a hazardous materials site on Leaking Underground Storage Tank (LUST), Spills, Leaks and Investigation Cleanup (SLIC), Cortese, or other relevant databases.	Water Division	DARM	Confirm that groundwater recharge basins are not located within an area that is listed as a hazardous materials site on Leaking Underground Storage Tank (LUST), Spills, Leaks and Investigation Cleanup (SLIC), Cortese, or other relevant databases.	Prior to final design approval
Measure 4.9.4a (NT/F). Proposed facilities located within two miles of a public use airport shall incorporate height and lighting restrictions identified in the applicable ALUCP. Construction equipment used to build structures and the structures themselves shall be limited in height in accordance with the Code of Federal Regulations.	Water Division	DARM	Confirm the adherence to height and lighting restrictions identified in the applicable ALUCP. Confirm construction equipment used to build structures and the structures themselves are at a height in accordance with the Code of Federal Regulations.	Prior to final design approval
Measure 4.9.4b (NT/F). Surface water features (settling basins, groundwater recharge facilities, etc.) associated with proposed project facilities shall be sited consistent with the guidance contained in the Federal Aviation Administration Advisory Circular 150/520-33b Hazardous Wildlife Attractants on or Near Airports, as applicable.	Water Division	DARM	Confirm that surface water features are sited consistent with the guidance contained in the Federal Aviation Administration Advisory Circular 150/520-33b Hazardous Wildlife Attractants on or Near Airports, as applicable.	Prior to final design approval
Public Services and Utilities				
Measure 4.10.6 (NT/F): Prior to construction of individual projects, the City shall prepare and implement a Utility Avoidance Plan. The plan would ensure that individual project specifications contain a detailed engineering and construction plan to avoid utility conflicts. Measures to avoid utility conflicts include but might not be limited to: <ul style="list-style-type: none"> • Verification of utility locations through field survey and use of the Underground Service Alert (USA). 	Water Division	DPU	Confirm the preparation and implementation of a Utility Avoidance Plan that ensures that individual project specifications contain a detailed engineering and construction plan to avoid utility conflicts.	Prior to construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Public Services and Utilities (cont.)				
<ul style="list-style-type: none"> Specifications prepared as part of the design plans that include procedures for the excavation, support, and fill of areas around utility cables and pipes. All affected utilities shall be notified of construction plans and schedule. Arrangements may be made with these entities regarding protection, relocation, or temporary disconnection of services. Notification of residents and businesses in the proposed project construction area of any planned utility service disruption two to four days in advance, in conformance with County and state standards. Reconnection of any disconnected cables and lines as soon as possible. 				
Measure 4.10.8: Implement Mitigation Measure 4.10.6.	See Mitigation Measure 4.10.6	See Mitigation Measure 4.10.6	See Mitigation Measure 4.10.6	See Mitigation Measure 4.10.6
Aesthetic Resources				
<p>Measure 4.11.2a (NT/F): During facility design, the City shall prepare a landscape plan for each aboveground project facility. The landscape plan shall include measures to restore disturbed areas by reestablishing existing topography, including replanting trees and/or reseeding with a native seed mix typical of the immediately surrounding area. The landscape plan shall include a required seed mix and plant palate. Vegetation screening shall be included in the landscape plan in order to shield proposed aboveground facilities from public view. The landscape plan shall include a monitoring plan to ensure that the site restoration and the establishment of vegetation is successful.</p>	Water Division Contractor	DARM DPW	Confirm that a landscape plan for each aboveground project facility is prepared. Confirm that landscape plan includes measures to restore disturbed areas. Confirm the landscape plan includes a required seed mix and plant palate. Confirm that a vegetation screening is included in the landscape plan to shield proposed aboveground facilities from public view. Confirm the landscape plan includes a monitoring plan to ensure that the site restoration and the establishment of vegetation is successful.	Prior to final design approval Following completion of construction
<p>Measure 4.11.2b (NT/F): Surface water treatment facility design shall include non-glare exterior coatings that are colored an earth tone to blend in with the surrounding landscape.</p>	Water Division	DARM	Confirm that the facility designs include non-glare exterior coatings that are colored an earth tone.	Prior to final design approval Following completion of construction
<p>Measure 4.11.3 (NT/F): Nighttime security lighting shall be equipped with directional shields that aim light downward and away from adjacent properties and public roadways. In addition, lighting fixtures shall be placed to concentrate light onsite to avoid spillover onto adjacent properties and public roadways.</p>	Water Division	DARM	Confirm that the nighttime security and associated parking lighting fixtures are equipped with directional shields that aim light downward and away from adjacent properties and public roadways. Confirm that lighting fixtures are placed to concentrate light onsite to avoid spillover onto adjacent properties and public roadways.	Prior to final design approval Following completion of construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Aesthetic Resources (cont.)				
Measure 4.11.4 (NT/F): Implement Mitigation Measures 4.11.2 and 4.11.3.	See Mitigation Measures 4.11.2 and 4.11.3	See Mitigation Measures 4.11.2 and 4.11.3	See Mitigation Measures 4.11.2 and 4.11.3	See Mitigation Measures 4.11.2 and 4.11.3
Cultural Resources				
Measure 4.12.1a (NT): Prior to construction of Conveyance Option 1, cultural resource surveys covering the remaining portions of the year-round maintenance access road along the Mill Ditch/Fresno Canal shall be completed and the findings documented. Mill Ditch/Fresno Canal shall be evaluated for its eligibility for listing in the National, California, and Fresno Registers. The evaluation shall be carried out by a qualified archaeologist and historian or architectural historian meeting the Secretary of the Interior's Standards. In the event that the canal is determined eligible for listing in the federal, state, or local registers, mitigation shall be recommended to minimize impacts to the canal. If avoidance of impacts is deemed infeasible, the City shall implement Mitigation Measure 4.12.1c.	Water Division	Historic Preservation	Confirm that the remaining portions of the year-round maintenance access road along the Mill Ditch/Fresno Canal are surveyed and evaluated its eligibility for listing in the National, California, and Fresno Registers. Confirm that the survey is carried out by a qualified historian or architectural historian meeting the Secretary of the Interior's Standards for Architectural History. Confirm the implementation of recommended mitigation is implemented should the canal be determined eligible for listing in the federal, state, or local registers	Prior to final design approval of Conveyance Option 1 Prior to construction
Measure 4.12.1b (NT/F): All areas slated for development or other ground-disturbing activities in the project area that contain structures 50 years old or older shall be surveyed and evaluated for their potential historic significance on a project-specific basis prior to approval of project plans. The survey shall be carried out by a qualified historian or architectural historian meeting the Secretary of the Interior's Standards for Architectural History. Demolition or substantial alteration of all previously recorded historic resources, including significant historic resources are encountered during the survey and evaluation efforts, shall be avoided. Any alterations, including relocation, to historic buildings or structures shall conform to the <i>Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings</i> (NPS, 1995). If avoidance of identified historic resources is deemed infeasible, the City shall implement Mitigation Measure 4.12.1c.	Water Division	Historic Preservation	Confirm that all properties slated for development or other ground-disturbing activities in the Metro Plan Area that contain resources 50 years old or older are surveyed and evaluated for their potential historic significance on a project-specific basis prior to approval of project plans. Confirm that the survey is carried out by a qualified historian or architectural historian meeting the Secretary of the Interior's Standards for Architectural History. Confirm that the City's Planning and Historic Preservation Staff is consulted with regarding any projects that may affect a historic resource within the Metro Plan Area. Confirm that the City's Historic Preservation Commission is also consulted, as appropriate, regarding any projects slated to impact areas of high sensitivity for historic resources. Confirm that demolition or substantial alteration of all previously recorded historic resources, including significant historic resources are encountered during the survey and evaluation efforts are avoided. Confirm that any alterations, including relocation, to historic buildings or structures conform to the <i>Secretary of the Interior's Standards for the Treatment of Historic</i>	Prior to final design approval Prior to construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Cultural Resources (cont.)				
			<i>Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings</i> (NPS, 1995). Confirm that if avoidance of identified historic resources is deemed infeasible, that the City prepares a treatment plan that includes, but is not limited to, photo-documentation and public interpretation of the resource.	
<p>Measure 4.12.1c (NT/F): If avoidance or relocation of an historic resource is determined infeasible, a qualified architectural historian shall be retained to document the affected historic resource in accordance with the National Park Service’s Historic American Buildings Survey (HABS) and/or Historic American Engineering Record (HAER) standards. Such standards typically include large format photography using (4x5) negatives, written data, and copies of original plans if available. The HABS/HAER documentation packages shall be archived at local libraries and historical repositories, as well as the Southern San Joaquin Valley Information Center of the California Historical Resources Information System. Public interpretation of historic resources at their original site shall also occur in the form of a plaque, kiosk or other method of describing the building’s historic or architectural importance to the general public.</p>	Water Division	Historic Preservation	Confirm that if avoidance or relocation of an historic resource is determined infeasible, a qualified architectural historian is retained to document the affected historic resource in accordance with the National Park Service’s Historic American Buildings Survey (HABS) and/or Historic American Engineering Record (HAER) standards. Such standards typically include large format photography using (4x5) negatives, written data, and copies of original plans if available. Confirm that the HABS/HAER documentation packages are archived at local libraries and historical repositories, as well as the Southern San Joaquin Valley Information Center of the California Historical Resources Information System, the City’s Historic Preservation archives and Planning Department. Confirm that public interpretation of historic resources at their original site is provided in the form of a plaque, kiosk or other method of describing the building’s historic or architectural importance to the general public.	On-going: construction
<p>Measure 4.12.2a (NT/F): All areas slated for development or other ground-disturbing activities shall be subject to a Phase I survey (including records search and archaeological survey) for archaeological resources on a project-specific basis prior to approval of proposed project plans. The survey shall be carried out by a qualified archaeologist in consultation with local Native American groups. If potentially significant archaeological resources are encountered during the survey, the City shall require that the resources are evaluated for their eligibility for listing on the National Register or the California Register, and that recommendations are made for treatment of these resources if found to be significant, in consultation with the appropriate Native American groups. All</p>	Water Division	Historic Preservation	Confirm that all areas slated for development or other ground-disturbing activities are subject to a Phase I survey (including records search and archaeological survey) for archaeological resources on a project-specific basis prior to approval of proposed project plans. Confirm that the survey is carried out by a qualified archaeologist in consultation with local Native American groups. Confirm that if potentially significant archaeological resources are encountered during the survey, that the City requires that the resources are evaluated for their eligibility for listing on the National Register or the California Register,	Prior to final design approval Prior to construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Cultural Resources (cont.)				
previously recorded prehistoric and historic-period archaeological resources, as well as any significant resources identified as a result of the survey, shall be avoided. Ground-disturbing activity in areas determined to be sensitive for cultural resources shall be monitored by a qualified archaeologist and Native American representative.			and that recommendations are made for treatment of these resources if found to be significant, in consultation with the appropriate Native American groups in the event that the resource is determined to be from the prehistoric period. All previously recorded prehistoric and historic-period archaeological resources, as well as any significant resources identified as a result of the survey, shall be avoided. Confirm that ground-disturbing activity in areas determined to be sensitive for cultural resources are monitored by a qualified archaeologist and Native American representative.	
Measure 4.12.2b (NT/F): Prior to construction a worker training program shall be implemented to inform all personnel involved with earthmoving activities the potential for prehistoric and historic-period subsurface archaeological resources to be uncovered and/or disturbed by proposed project-related earth moving; where such remains are most likely to be encountered during earth moving; and procedures to be employed if archaeological resources are discovered during excavations.	Water Division	Historic Preservation	Confirm that a worker training program is implemented prior to construction to inform all personnel involved with earthmoving activities the potential for prehistoric and historic-period subsurface archaeological resources to be uncovered.	Prior to construction On-going: construction
Measure 4.12.2c (NT/F): During construction, should prehistoric or historic-period subsurface cultural resources be discovered, all activity in the vicinity of the find shall stop and a Secretary of the Interior qualified archaeologist will be contacted to assess the significance of the find according to <i>CEQA Guidelines</i> Section 15064.5. If any find is determined to be significant, the proposed project proponent and the archaeologist will determine, in consultation with local Native American groups, appropriate avoidance measures or other appropriate mitigation. All significant cultural materials recovered may be, as necessary and at the discretion of the consulting archaeologist and in consultation with local Native American groups, subject to scientific analysis, professional museum duration, and documentation according to current professional standards.	Water Division	Historic Preservation	Confirm that during construction, if prehistoric or historic-period subsurface cultural resources are discovered, that all activity in the vicinity of the find is stopped and a qualified archaeologist is contacted to assess the significance of the find according to <i>CEQA Guidelines</i> Section 15064.5. Confirm that if any find is determined to be significant, the proposed project proponent and the archaeologist determine, in consultation with local Native American groups, appropriate avoidance measures or other appropriate mitigation. Confirm that all significant cultural materials recovered are, as necessary and at the discretion of the consulting archaeologist and in consultation with local Native American groups, subject to scientific analysis, professional museum duration, and documentation according to current professional standards.	On-going: construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Cultural Resources (cont.)				
<p>Measure 4.12.3a: If human skeletal remains are uncovered during proposed project construction, work in the vicinity of the find shall cease and the Fresno County coroner will be contacted to evaluate the remains, following the procedures and protocols set forth in Section 15064.5 (e)(1) of the <i>CEQA Guidelines</i>. If the County coroner determines that the remains are Native American, the City of Fresno will contact the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641) and the Most Likely Descendant will be identified. The Most Likely Descendant will make recommendations for the treatment of any human remains.</p>	Water Division	Historic Preservation	Confirm that if human skeletal remains are uncovered during proposed project construction, work in the vicinity of the find is stopped and the Fresno County coroner is contacted to evaluate the remains, following the procedures and protocols set forth in Section 15064.5 (e)(1) of the <i>CEQA Guidelines</i> . Confirm that if the County coroner determines that the remains are Native American, Native American Heritage Commission is contacted, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641) and the Most Likely Descendant is identified. Confirm that the Most Likely Descendant has made recommendations for the treatment of any human remains.	On-going: construction
<p>Measure 4.12.4a (NT/F): If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, all ground disturbing activities within 50 feet of the find shall be halted until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate salvage measures in consultation with the City of Fresno and in conformance with Society of Vertebrate Paleontology Guidelines (SVP, 1995; SVP, 1996).</p>	Water Division	Historic Preservation	Confirm that If paleontological resources, such as fossilized bone, teeth, shell, tracks, trails, casts, molds, or impressions are discovered during ground-disturbing activities, all ground disturbing activities within 50 feet of the find are halted until a qualified paleontologist can assess the significance of the find and, if necessary, develop appropriate salvage measures in consultation with the City of Fresno and in conformance with Society of Vertebrate Paleontology Guidelines (SVP, 1995; SVP, 1996).	On-going: construction
<p>Measure 4.12.4b (NT/F): Prior to all Metro Plan facilities involving excavations greater than 6 feet in depth (including pipeline crossings and groundwater recharge basins), the City of Fresno shall retain a qualified paleontologist to design a monitoring and mitigation program. The paleontological resource monitoring and mitigation program should include:</p> <ul style="list-style-type: none"> • A worker training program to inform all personnel involved with earthmoving activities the potential for fossil remains being uncovered and/or disturbed by proposed project-related earth moving; where such remains are most likely to be encountered during earth moving; and procedures to be employed if fossil remains are discovered during excavations. 	Water Division	Historic Preservation	Confirm that prior to all Metro Plan facilities involving excavations greater than 6 feet in depth (including pipeline crossings and groundwater reuse basins), that a qualified paleontologist is retained to design a monitoring and mitigation program.	Prior to construction On-going: construction

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsibility for Implementation	Responsibility for Monitoring	Action by Monitor	Timing
Cultural Resources (cont.)				
<ul style="list-style-type: none"> • Preconstruction coordination with appropriate agencies, and identification of an institution willing and able to accept fossil specimens collected during the mitigation program. The institution shall serve as an information repository over the course of the proposed project. • A schedule and plan for monitoring earth-moving activities, and a provision that monitoring personnel have the authority to halt construction activities should a potential fossil-find be unearthed. • Emergency discovery procedures, including survey and record keeping of fossil-finds, bulk sediment sample collection and processing, specimen identification, disposition, or museum curation of any specimens and data recovered. • Monitoring and data recovery activities shall be documented in daily monitoring reports, as well as a final mitigation monitoring report at the completion of construction activities, which shall be submitted to the City of Fresno. <p>Implementation of the mitigation program and data recovery shall occur in accordance with SVP standards (SVP, 1995; SVP, 1996).</p>				
<p>Measure 4.12.5 (NT/F): Implement Mitigation Measure 4.12.1.</p>	<p>See Mitigation Measure 4.12.1</p>			
<p>Measure 4.12.5 (NT/F): Implement Mitigation Measures 4.12.2, 4.12.3, and 4.12.4.</p>	<p>See Mitigation Measures 4.12.2, 4.12.3, and 4.12.4</p>			