NOTICE OF PREPARATION

Date: **September 6, 2013**

To: **California Office of Planning and Research, Responsible and Trustee Agencies, and other Interested Parties**

From: **Brock Buche, Project Manager, City of Fresno Department of Public Utilities**

Subject: **Notice of Preparation of a Draft Environmental Impact Report**

Project Title: **Fresno Metropolitan Water Resources Management Plan Update**

The City of Fresno (City) will be the Lead Agency to prepare an Environmental Impact Report (EIR) for the Fresno Metropolitan Water Resources Management Plan Update and certain near-term projects (Metro Plan Update or proposed project). The City would like to know your views (or the views of your agency) as to the scope and content of the environmental information and analysis that should be contained in the Metro Plan Update EIR.

The overall objective of the City Metro Plan Update 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. The study area for the Metro Plan Update includes the existing city limits and City of Fresno Sphere of Influence (SOI) area designated by the 2025 Fresno General Plan as more particularly detailed in the attached Project Description. Because the City is in the process of updating its general plan, the EIR will analyze the project with regard to the adopted general plan in effect at the time of consideration of certification of the EIR.

The purpose of this Metro Plan Update is to update and refine the 1996 Fresno Metropolitan Water Resources Management Plan (1996 Metro Plan) taking into consideration available new data and accommodating physical and institutional changes which have occurred since the 1996 Metro Plan was prepared. The completed Metro Plan Update would facilitate future water resources decisions and utility planning, and would satisfy requirements for potential State funding. Implementation of the City's recommended water supply program would result in a significant shift in the use of available water resources and an increase in diversity in the City's water supply portfolio which will enhance the City's overall water supply reliability. Implementation of the Metro Plan Update involves near-term and long-term water projects including, surface water treatment and storage facilities; a raw water intake; groundwater supply, storage and recharge facilities; recycled water treatment and distribution facilities; water distribution pipelines; and increased water conservation measures.

The EIR will be designed to function as both a program-level EIR for the overall Metro Plan Update (including future projects) and a project-level EIR for proposed near-term projects (construction anticipated by 2018). Please see the attached Project Description for further details on the proposed project.

This Notice of Preparation (NOP) and the attached project description can also be found at these 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

Written comments on the scope of the EIR must be received no later than 30 days after publication of this NOP, by 5:00 p.m. on October 14, 2013. Please send your written responses to:

Brock Buche, Project Manager
City of Fresno Department of Public Utilities, Water Division
1910 East University Avenue
Fresno, CA 93703-2988
(559) 621-5325
FresnoMetroPlan@esassoc.com

In order for the public and regulatory agencies to have an opportunity to ask questions and submit oral comments on the scope of the EIR, two scoping meetings will be held as follows:

- A public agency scoping meeting will be held on September 16, 2013 from 2:30 p.m. to 4:00 p.m. in the large conference room of the City of Fresno Department of Public Utilities Water Division Corporation Yard located at 1910 East University Avenue, Fresno, CA 93703-2988
- A public scoping meeting for other interested parties will be held on September 16, 2013 from 6:00 p.m. to 8:00 p.m. in the large conference room of the City of Fresno Department of Public Utilities Water Division Corporation Yard located at 1910 East University Avenue, Fresno, CA 93703-2988

SECTION 1
Project Description

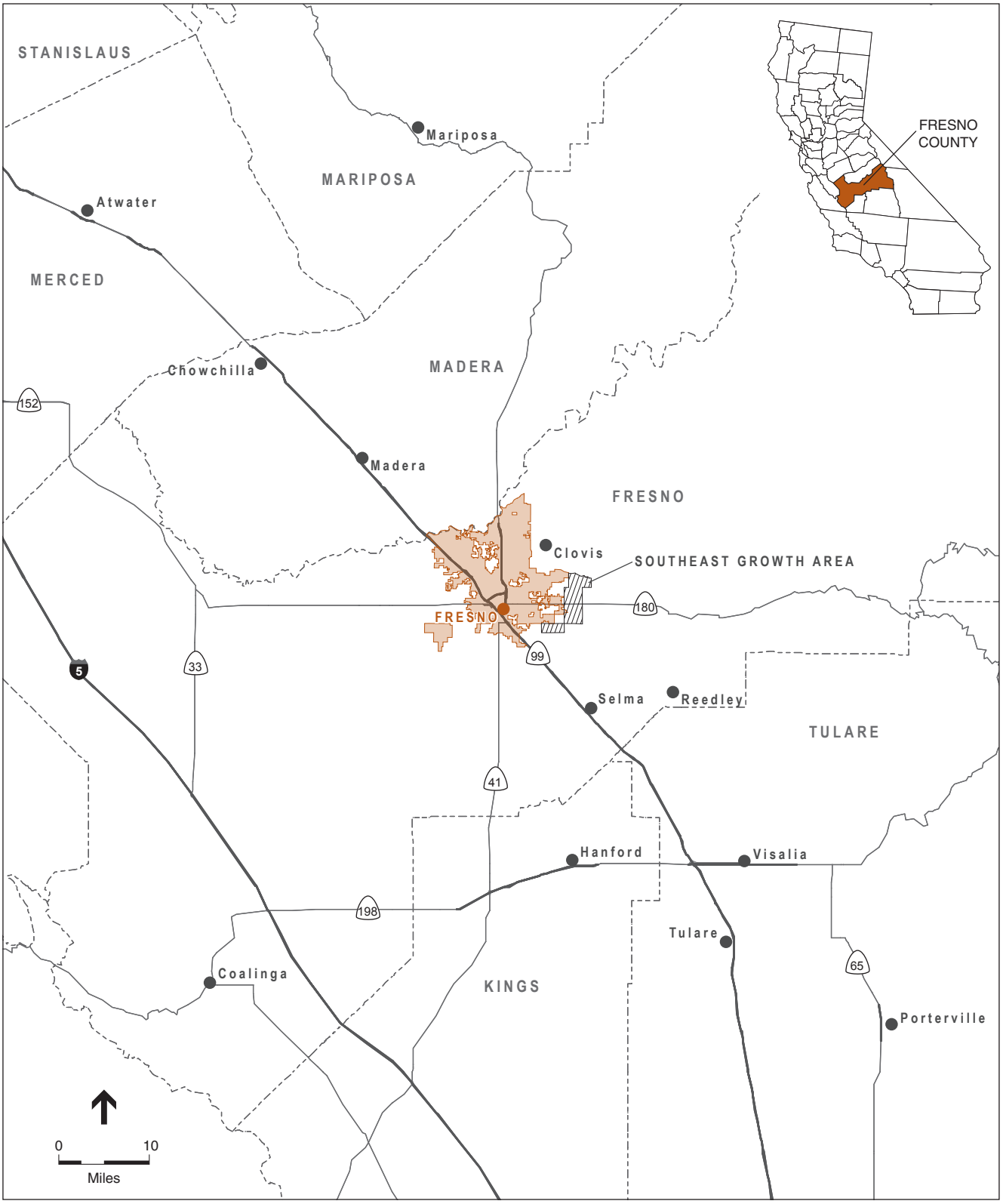
1.1 Introduction

The City of Fresno (City) proposes to adopt and implement the Fresno Metropolitan Water Resources Management Plan Update (Metro Plan Update or proposed project). The purpose of the Metro Plan Update is to update and refine the 1996 Fresno Metropolitan Water Resources Management Plan (1996 Metro Plan) taking into consideration available new data and accommodating physical and institutional changes which have occurred since the 1996 Metro Plan was prepared. The completed Metro Plan Update would facilitate future water resource decisions and utility planning, and would satisfy requirements for potential State funding. Implementation of the City of Fresno's (City) recommended water supply plan would result in a significant shift in the use of available water resources and an increase in diversity in the City's water supply portfolio which would enhance the City's overall water supply reliability. The proposed Metro Plan Update includes near-term projects and future projects including surface water treatment facilities, regional transmission facilities, groundwater facilities, potable water storage facilities, recycled water facilities, and water conservation measures. A detailed description of both the project specific elements and program level elements of Fresno Metro Plan Update is provided in Section 1.6 below.

The overall objective of the City Metro Plan Update is to provide sustainable and reliable water supplies to meet the demands of existing and future customers through buildout of the adopted general plan in effect at the time of approval of the EIR. The City is in process of updating the General Plan (2035 General Plan Update). The project area for the proposed Metro Plan Update includes the existing city limits and the City of Fresno Sphere of Influence (SOI) designated by the adopted 2025 General Plan. The boundaries designated by the proposed 2035 General Plan Update are consistent with those adopted in the 2025 General Plan; therefore, the proposed project area would not change. Because the City is in the process of updating its general plan, the EIR will analyze the project with regard to the adopted general plan in effect at the time of consideration of certification of the EIR.

1.2 Project Location

The City of Fresno is located in California's Central Valley in northern Fresno County primarily east of State Highway 99. The City is located approximately 170 miles south of the City of Sacramento and 220 miles northeast of the City of Los Angeles (see **Figure 1-1**). The Fresno-Clovis metropolitan area, with a current population of 1,002,046, is the second largest metropolitan area in the Central Valley after the Sacramento metropolitan area. The City is the county seat of Fresno County, the



SOURCE: DeLorme Street Atlas USA, 2000; and ESA, 2010

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Figure 1-1
Regional Location

fifth largest city in California, and currently encompasses approximately 110 square miles in geographic area. The project area for the Metro Plan Update includes the existing city limits and City of Fresno SOI. The project location and general project elements are shown in **Figures 1-1 through 1-3**, located at the end of Section 1.

1.3 Project Background

The Metro Plan Update would refine and bring up to date the 1996 Fresno Metropolitan Water Resources Management Plan (1996 Metro Plan)[1]. Over the past 12-plus years, population growth, land development and water use trends, institutional and regulatory issues, and other factors have shifted, motivating this planning effort. The engineers and planners tasked with preparing the Metro Plan Update have reviewed and evaluated a broad variety of water demand and facility information including new population projections, and physical and institutional changes which have occurred since 1996 and have identified the following changes:

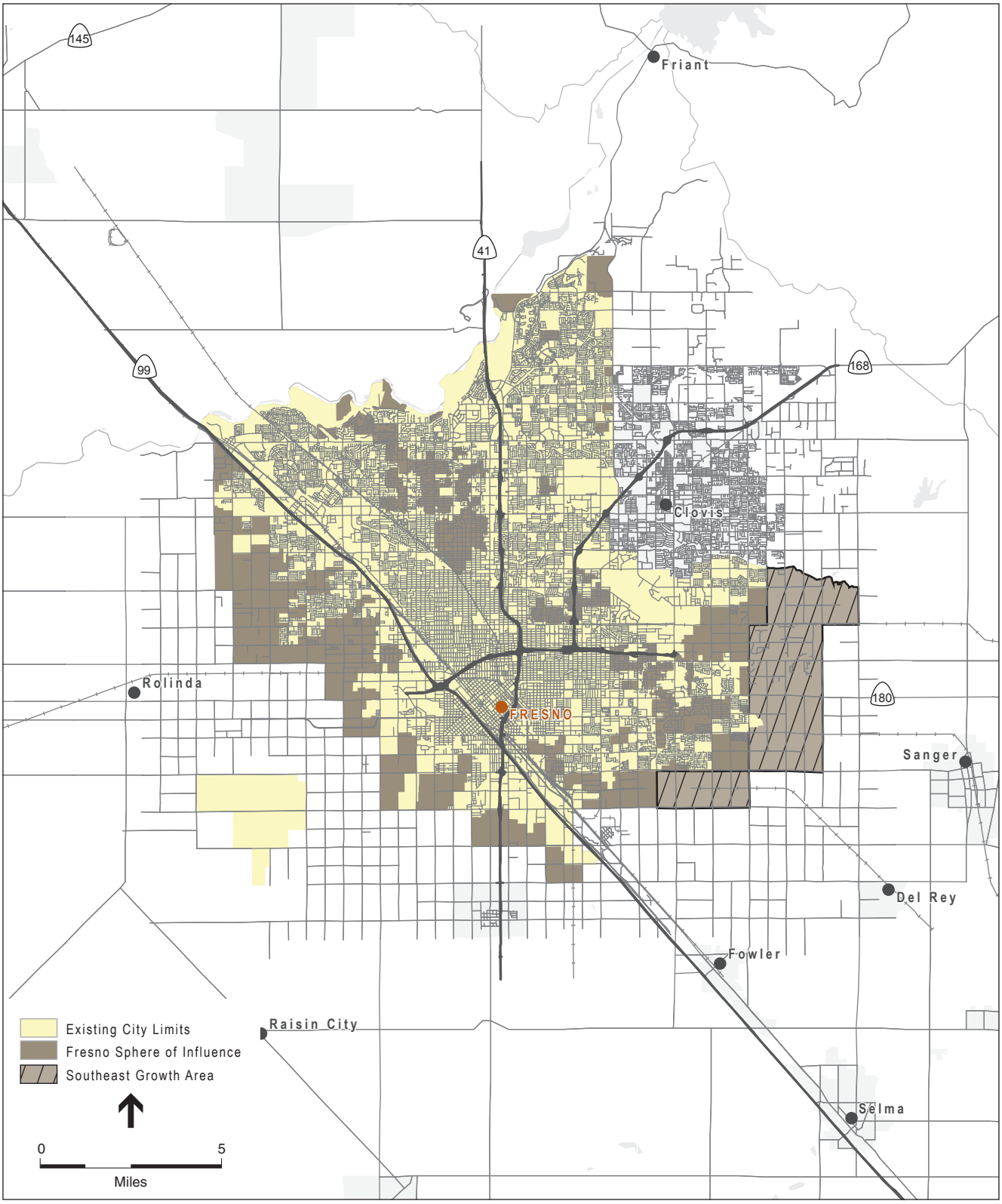
- **Growth in Water Demand.** Fresno's population and associated water demand grew faster than was projected in the 1996 Metro Plan Update.
- **Need for Additional Water System Facilities.** The existing water system infrastructure is inadequate to meet future demand. The City's predominant use of groundwater wells is no longer considered sustainable due to the declining water table, as a result of groundwater overdraft and degradation of water quality.
- **Refocused Study Area.** The 1996 Metro Plan evaluated the entire Fresno-Clovis metropolitan area. To meet the future needs and challenges of the City of Fresno, this Metro Plan Update is focused entirely on the City of Fresno and its defined SOI.

1.4 Existing Water Supply

The City of Fresno Water Division (Water Division) serves an estimated population of 514,090 (as of January 1, 2013) located in the City limits and Sphere of Influence (SOI). Areas not served by the Water Division within the SOI include areas served by: the Bakman Water Company (Bakman); Pinedale County Water District (Pinedale); Park Van Ness Mutual Water Company (Park Van Ness); California State University at Fresno (CSU Fresno); and private groundwater users located within County islands in the City SOI.

In 2012, the City met water demand by using 86 percent groundwater and 14 percent treated surface water. Prior to the 2004 opening of the City's Northeast (NE) Surface Water Treatment Facility (SWTF), groundwater accounted for 100 percent of water supplies. The following describes the existing groundwater and surface water supply sources.

[1] City of Fresno, *Fresno/Clovis 1996 Metropolitan Water Resources Management Plan.* Prepared by CH2M Hill.



SOURCE: ESRI, 2008; West Yost, 2009; City of Fresno, 2009; and ESA, 2009

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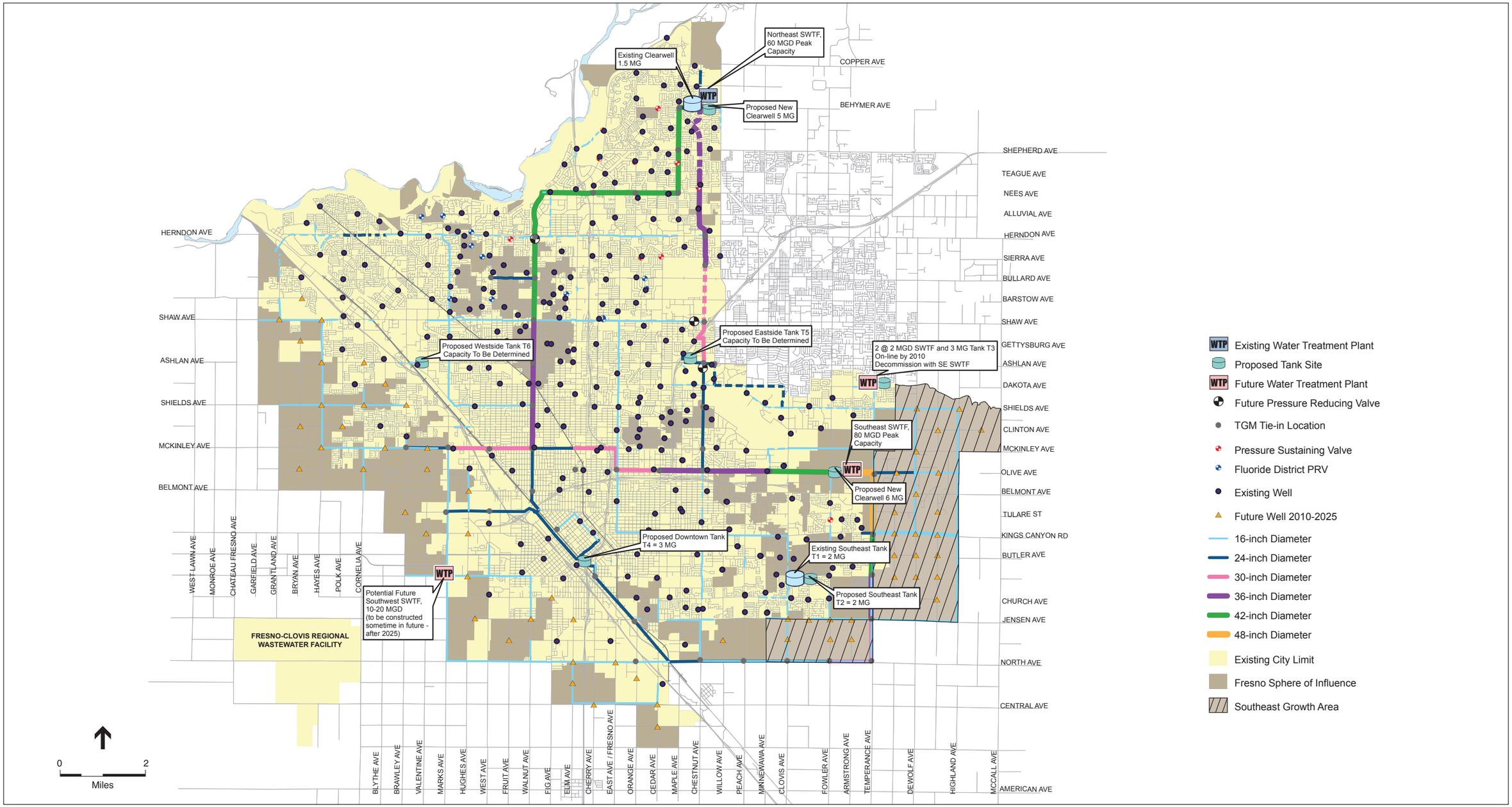
Figure 1-2
City of Fresno Project Area



SOURCE: City of Fresno, 2009; ESRI, 2009; West Yost, 2012; and ESA, 2012

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Figure 1-3

Proposed Project – Overview

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1.4.1 Groundwater

The City's groundwater supplies are extracted from the Kings Subbasin, which is a subbasin of the San Joaquin Valley Groundwater Basin (SJV Basin). The City currently operates approximately 270 municipal supply wells, and until late 2004, relied solely on pumped groundwater to meet water demands within its service area.

Groundwater levels in the Fresno area have declined by an average of about 1.5 feet per year since 1990. The slowest groundwater level declines (less than 0.5 feet per year) were generally observed in the southwestern portion of the City in the downtown area, while groundwater level declines were observed to increase to 1.0 foot per year northeast of the downtown area, and as high as 1.5 feet per year in the northern and southeastern (near the Fresno Air Terminal) portions of the City. The largest average annual groundwater level declines (3.0 feet per year) were observed in the northeastern area of the City, near the City of Clovis border.

1.4.2 Surface Water

The City of Fresno currently has three sources of surface water supplies:

- A contract with the Fresno Irrigation District (FID) for a portion of FID's water entitlement from the Kings River;
- A United States Bureau of Reclamation (USBR) contract; and
- The City's Wastewater Recycle Exchange Agreement with FID.

Some of these available surface water supplies are treated at the City's existing Northeast Surface Water Treatment Facility (SWTF) located in northeast Fresno and some are used for intentional groundwater recharge. The information below, included in the City's 2010 Urban Water Management Plan[2], indicates the amount of water available for diversion during "Normal Years". A normal year is a hydrologic year classification that averages "normal wet" and "normal dry" years based on available water data 1964 to 2002.

FID Contract

On May 25, 1976, the City signed a contract with the FID for delivery of the City's pro rata share of FID's water entitlements on the Kings River. The contract specifically excludes any of FID's Class 2 USBR entitlement and any water stored in Pine Flat Reservoir by FID. **Table 1-1** presents the FID Kings River water projected to be available to the City during normal years.

[2] City of Fresno, *City of Fresno Final 2010 Urban Water Management Plan.* Prepared by West Yost Associates. November 2012.

TABLE 1-1
FID KINGS RIVER DIVERSIONS PROJECTED TO BE AVAILABLE TO THE CITY FOR EACH HYDROLOGIC YEAR TYPE (ACRE FEET OR AF)

Classification	2015	2020	2025
Wet	126,400	139,100	151,800
Normal-wet	115,200	126,800	138,400
Normal	105,400	115,900	126,500
Normal-dry	96,500	106,200	115,800
Dry	86,600	95,300	104,000
Critical-high	62,800	69,100	75,400
Critical-low	54,600	60,100	65,600

a. In 2005, the City received 0 AF of water from FID.
b. In 2010, the City received 500 AF of water from FID.

USBR Contract

In December 2010, the City executed a permanent contract with the USBR authorized under Section 9(d) of the Reclamation Project Act of 1939 providing the City with a permanent supply of surface water supplies from the USBR. USBR oversees diversions from the San Joaquin River through the Friant-Kern Canal of the Central Valley Project (CVP). The USBR owns the Friant-Kern Canal and the Friant Water Authority maintains and operates the Friant Kern Canal. The City's total entitlement from the USBR is 60,000 acre-feet per year (af/yr) of Class 1 water.

USBR Class 1 water is generally water available from Millerton Lake, and is a very dependable water supply, regardless of the type of hydrologic water year. Class 2 water is generally any excess water available as determined by USBR, and is not considered as dependable as Class 1 water. The projected surface water available for the City to purchase from the USBR during each hydrologic year defined by the 2006 Settlement Agreement is summarized in **Table 1-2**. As shown in **Table 1-2**, the projected water supply from the USBR, during each hydrologic year type, does not change over time. 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.

TABLE 1-2
USBR ENTITLEMENT PROJECTED TO BE AVAILABLE TO THE CITY FOR EACH HYDROLOGIC YEAR TYPE (AF)

Classification	2015	2020	2025
Wet	60,000	60,000	60,000
Normal-wet	60,000	60,000	60,000
Normal	58,200	58,200	58,200
Normal-dry	56,200	56,200	56,200
Dry	39,200	39,200	39,200
Critical-high	25,200	25,200	25,200
Critical-low	13,900	13,900	13,900

a. In 2005, the City received 58,731 AF of water from USBR.
b. In 2010, the City received 71,959 AF of water from USBR.

Wastewater Recycle Exchange

In addition to the contracts with FID and the USBR, the City also has a contract with FID that allows the City to pump groundwater developed through the percolation of previously treated wastewater effluent. This percolated water is then extracted and pumped into FID canals for delivery to downstream customers.

In return, the agreement states that FID will provide the City with surface water from either its Kings River entitlement or its Class 2 USBR water "insofar as is feasible and practical." The quantity of surface water that FID is required to provide is limited to 46 percent of the groundwater that the City pumps into FID's delivery canal, and the contract limits the annual quantity that can be pumped into FID's canals to 30,000 af/yr or 100,000 AF over a 10 year period. Based on a 46 percent return from FID, the City is entitled to obtain 13,800 AF (or 46 percent of 30,000 af/yr) of Kings River water from FID during all hydrologic conditions. **Table 1-3** presents the exchange water projected to be available to the City.

TABLE 1-3
EXCHANGE WATER PROJECTED TO BE AVAILABLE TO THE CITY (AF)

Classification	2015	2020	2025
All Hydrologic Years (Wet, Normal-wet, Normal, Normal-dry, Dry, Critical-high and Critical-low)	13,800	13,800	13,800

a. In 2005, the City received no water from the wastewater recycle exchange.
b. In 2010, the City received no water from the wastewater recycle exchange.

1.4.3 Summary of Existing and Future Surface Water Supplies

Table 1-4 provides a summary of the City's estimated available existing and projected surface water supplies based on the information described above. As shown, the City's projected future surface water supplies in normal years are expected to increase to 198,500 af/yr 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).

TABLE 1-4
EXISTING AND FUTURE SURFACE WATER SUPPLIES PROJECTED TO BE AVAILABLE DURING NORMAL YEARS (AF)

Surface Water Supply	2015	2020	2025
FID Kings River	105,400	115,900	126,500
USBR	58,200	58,200	58,200
Recharge/Exchange Water	13,800	13,800	13,800
Total Surface Water Supply in Normal Years	177,400	187,900	198,500
Planned Future Surface Water Treatment Capacity [a, b]	30,800	123,400	123,400

a. The existing treatment capacity for the NE SWTF is 30 mgd (30,800 af/yr).
b. Planned future treatment capacity includes: constructing a new 80 million gallons per day (mgd) Southeast (SE) SWTF to be located in the southeast portion of the City beginning in spring of 2015 and completed by winter 2018; and expanding the existing NE SWTF from 30 mgd to 60 mgd about 2020. The proposed new Southwest (SW) SWTF is not included as it is anticipated to be constructed sometime after 2025. Annual treatment capacity assumes that the SWTFs are out of service for one month of the year for maintenance activities.

1.5 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:

- Maximize use of available surface water supplies for direct treatment and use, and intentional groundwater recharge;
- Balance the City's groundwater operations by 2025;
- Replenish groundwater basin storage when surplus surface water supplies are available;
- Continue to implement and expand demand management/water conservation measures in compliance with the City's United States Bureau of Reclamation (USBR) contract and to achieve specific water conservation goals; and
- Incorporate tertiary-treated recycled water into its future water supply portfolio to meet non-potable demands in new development areas and existing parts of the City.

1.6 Proposed Project Elements

The proposed Metro Plan Update includes near-term projects and future projects as shown in **Figure 1-3**. This section provides a summary of both near-term and future project elements proposed under the Metro Plan Update. **Table 1-5** summarizes proposed future surface water treatment capacity.

TABLE 1-5
PROPOSED FUTURE SURFACE WATER TREATMENT CAPACITY

Surface Water Treatment Facility	Design Capacity (Average Treatment Capacity)[a], mgd	Annual Production Capacity, af/yr
New SE SWTF (by 2018)	80 mgd (70 mgd)	72,000 af/yr
Existing NE SWTF		
Current Design Capacity	30 mgd	30,800 af/yr
Future Expansion (Additional 30 mgd) (by about 2020)	60 mgd (50 mgd)	51,400 af/yr
Future SW SWTF (by about 2025)	10 to 20 mgd	10,000 to 20,000 af/yr
Total Nominal Future SWTF Treatment and Production Capacity[b]	140 mgd (120 mgd)	123,400 af/yr

a. Average treatment capacity is based on an 11-month operations period each year to produce the required quantity of treated surface water for direct use.
b. Total does not include potential new SW SWTF, for which the timing and treatment capacity will be determined in the future.

Surface Water Treatment Facility and Storage Facilities

- Construction of a new SE SWTF with a design capacity of 80 mgd by winter 2018.
- Expansion of the existing NE SWTF from 30 mgd to 60 mgd (design capacity) around 2020.

- Future construction of a new SW SWTF (capacity of 10 to 20 mgd) in the southwestern part of the City to provide added flexibility for serving future demands in that portion of the City around 2025.
- New potable water storage facilities located at key locations in the City to provide operational flexibility during peak demand periods and provide emergency storage capacity.

Groundwater

- Reduction in annual groundwater use and maintenance of existing intentional groundwater recharge quantities to achieve and maintain balanced groundwater operations;
- Increased recharge capacity (20,500 af/yr additional) through the increased use of existing recharge facilities and construction and maintenance of new recharge facilities (approximately 340 acres of additional recharge area) to allow for increased recharge in years when surplus surface water is available to help restore groundwater levels to historical levels;
- Additional intentional groundwater recharge may be achieved through the construction of expanded or new recharge basins and/or the development of an Aquifer Storage and Recovery (ASR) Well System.

Recycled Water Supplies

A detailed City of Fresno Recycled Water Master Plan and EIR (SCH# 2010051015) was finalized by the City of Fresno in June of 2011. The Recycled Water Master Plan identifies potential recycled water use opportunities within the City and its SOI and includes a plan for the installation and operation of treatment, storage and distribution infrastructure to serve the City and SOI. In addition to the Master Plan, the City intends to consider the adoption of a "Recycled Water Ordinance" to assist the City in implementing the Recycled Water Master Plan. The purpose of the ordinance would be to establish water recycling policy and criteria for its use within the current City limits as well as its SOI as lands within the SOI are annexed into the City. More specifically, the Ordinance would contain provisions addressing various topics related to implementation of the goals, policies and objectives of the Master Plan.

A brief description of the topics discussed in the Recycled Water Master Plan is provided below. The Metro Plan Update will take into account the City's anticipated future use of recycled water as part of its overall future water supply plan. However, the Metro Plan EIR will not re-analyze the construction and operation of specific recycled water facilities as they were adequately analyzed in the Recycled Water Master Plan EIR.

- Introduction of recycled water supply for landscape irrigation and other non-potable uses to offset potable water demands:
    - Use of North Fresno WRF to irrigate Copper River Golf Course (initially 750 af/yr, increasing to 1,000 af/yr by 2015)
    - Use of up to 25,000 af/yr of recycled water for landscape irrigation and other non-potable uses in new development areas and existing parts of the City by 2025 (highly treated recycled water to be produced at new satellite plants, stand-alone plants and/or an expanded Regional Wastewater Reclamation Facility (RWRF))

Water Conservation

- Water conservation measures including:
  - Completing residential water metering program (completed)
  - Implementing rebate programs for water conserving devices and systems
  - Implementing Commercial, Industrial, and Institutional water conservation programs
  - Joining the California Urban Water Conservation Council (CUWCC) and participating in informational and training workshops and jointly-funded water conservation programs
  - Enacting a Retrofit Upon Resale Ordinance
  - Implementing Turf Replacement Rebates ("Cash for Grass")
  - Developing a Landscape Water Audit and Budget Program
  - Developing a Prioritized Leak Detection Program
  - Conducting a Complete Water System Audit
  - Billing with Commodity Rates (and eventually Tiered Rates)

1.6.1 Near-term Project Elements

Proposed near-term elements for the Metro Plan Update are summarized in **Table 1-6**. These elements will be analyzed at a project level in the EIR.

TABLE 1-6
NEAR-TERM PROJECT ELEMENTS

Infrastructure Component	Description
Surface Water Treatment Facilities	New SE SWTF • New SWTF with total design capacity of 80 mgd and raw water intake and transmission pipeline to the facility • New clearwell (8 to 12 MG) • Potential relocation of the existing City Department of Public Utilities Water Division Administrative Offices and Corporation Yard (i.e. Water Yard) to the SE SWTF property Existing NE SWTF • Operational improvements to increase from current 27.5 mgd operational capacity to 30 mgd design capacity • Expansion of existing SWTF design capacity from 30 to 60 mgd • New 5.0 MG clearwell (in addition to existing 1.5 MG clearwell)
Potable Water Regional Transmission Facilities	Extensive new potable water transmission system pipelines to distribute treated surface water supplies from the SWTFs to customers: • Regional transmission main from proposed SE SWTF west in Olive Avenue, north in First Street, and west in McKinley Avenue or Belmont Avenue, then south in Palm Avenue • Regional transmission main from the proposed SE SWTF east in Olive Avenue, south in Temperance Avenue, and west in North Avenue connecting to a Downtown storage tank located near H Street and Santa Clara • Regional transmission main from proposed SE SWTF east in Olive Avenue to DeWolf Avenue to serve the proposed Southeast Growth Area

Each of the proposed near-term project elements is described in more detail below.

New 80 MGD SE SWTF

Based on the overall objective of providing a sustainable and reliable water supply for the City for the future, the Metro Plan Update recommends maximizing the use of available surface water supplies, balancing groundwater operations and replenishing groundwater storage to improve the reliability and diversity of the City's water supply portfolio. A new SE SWTF is proposed to help meet these objectives. The proposed SE SWTF site would be located on a 58-acre property at the northwest corner of Armstrong and Olive Avenues. Treated surface water supplies from the proposed new SE SWTF would serve existing and future customers in the southern part of the City's water service area within the City's SOI.

The proposed 80 mgd design capacity for the SE SWTF would allow the City to treat up to 72,000 af/yr of surface water supplies for direct use (based on an average treatment capacity of 70 mgd for 11 months of the year assuming a Mill Ditch raw water conveyance system), or approximately 89,600 af/yr assuming the full 80 mgd capacity for 12 months served via a raw water conveyance pipeline which is not associated with Mill Ditch. Based on the proposed location of the new SE SWTF, the source of the raw water supply for the new SE SWTF would be the Kings River, possibly delivered via FID's Mill Ditch. One possible intake location could be at the intersection of Armstrong Avenue and Mill Ditch, just north of the facility site. An alternative location is via an existing FID easement located along the western side of the SE SWTF site, which is diverting flows from Mill Ditch. And an alternative intake and buried raw water transmission pipeline located east of the SE SWTF site is also being considered. Based on the City's future water supply plan, it is estimated that construction of the 80 mgd SE SWTF would begin in spring of 2015 and that the facility would be operational by winter 2018.

Additional improvements at the SE SWTF include the potential relocation of the existing City Department of Public Utilities Water Division Administrative Offices and Corporation Yard (i.e. Water Yard) to the proposed SE SWTF and also the potential construction of a demonstration garden for water use and conservation education.

Operational Improvements and Expansion of the Existing NE SWTF

The City's existing NE SWTF has some operational constraints which prevent it from being operated at its full design capacity of 30 mgd. The current operational capacity is about 27.5 mgd. Some of the planned improvements for this site include, but are not limited to: increased clearwell storage capacity, re-rating filter flow capacities, and expanded equipment storage areas. The City is working on these improvements to allow for the operation of the NE SWTF at its full design capacity of 30 mgd. The Metro Plan Update proposes that this facility be expanded by 30 mgd to a total design capacity of 60 mgd and be operational in 2020. This proposed expansion would provide the City with the capability to treat a total of 51,400 af/yr for direct use from the NE SWTF based on an average treatment capacity of 50 mgd for 11 months of the year, consistent with the Metro Plan Update objective of maximizing the use of available surface water supplies to improve the reliability and diversity of the City's water supply portfolio.

Transmission System

A major north/south regional transmission system in Chestnut Avenue is proposed to connect the two treatment facilities. Part of this transmission system has already been constructed. Other major transmission mains (24-inch diameter to 48-inch diameter) would be located in North Maple Avenue, Nees Avenue, Olive Avenue, McKinley Avenue, North Avenue, G Street, Palm Avenue, Bullard Avenue, and Temperance Avenue, as shown on, as shown on **Figure 1-3**. A summary of the proposed regional transmission main system and transmission grid main (TGM) pipelines that would be needed to serve the 2025 SOI is presented in **Table 1-7**. Specific characteristics of the system include:

- No individual customer service taps on regional transmission system pipelines;
- Water to the TGM system would be provided from turnouts off the regional transmission system;
- The existing TGM system would be expanded and strengthened; and
- Water would be provided to the local distribution systems through a grid of 16-inch diameter TGM pipes.

TABLE 1-7
POTABLE WATER TRANSMISSION MAIN SUMMARY (THROUGH 2025)

Pipe Diameter, inches	Length, feet
48	12,900
42	59,100
36	47,100
30	39,200
24	107,500
16 (TGM)	506,200
Total	**772,000**

SOURCE: City of Fresno Metro Plan Phase 2, January 2011

1.6.2 Future Project Elements

Proposed future elements for the Metro Plan Update are summarized in **Table 1-8** below. These elements will be analyzed at a program level in the EIR and will require additional environmental analysis and documentation prior to construction and operation in order to be in compliance with CEQA.

TABLE 1-8
FUTURE PROJECT ELEMENTS

Infrastructure Component	Description
Surface Water Treatment Facilities	Future SW SWTF • 10 to 20 mgd

Potable Water Regional Transmission Facilities	• New potable water transmission and distribution system pipelines to distribute water supplies to customers.
	• To be designed and constructed by 2020
	  • Regional transmission main from NE SWTF along Palm Avenue to McKinley Avenue
	  • Northerly crossing beneath Highway 99 and railroad, along McKinley Avenue.
	  • Other new water facilities including pump stations, groundwater wells

Potable Water Storage Facilities	New potable water storage facilities located at key locations in the City to provide operational flexibility during peak demand periods and provide emergency storage capacity • New clearwells at NE and SE SWTFs • New Eastside Tank "T5" (assumed to be 4 million gallons) (possibly near Chestnut Avenue and Ashlan Avenue) • New Westside Tank "T6" (assumed to be 4 million gallons) (near Highway 99 at Ashlan Avenue)
Groundwater Facilities	• 65 new wells by 2025 • Groundwater treatment systems on new wells as needed to address organic and inorganic water quality contaminants, as well as potential upcoming State and Federal regulations • Expanded existing groundwater recharge basins and/or new groundwater recharge basins/areas (340 acres of additional recharge area; 425 acres total including roadways and setbacks) to increase intentional groundwater recharge capabilities, particularly in years when surplus surface water supplies are available for recharge • Potential Aquifer Storage and Recovery (ASR) System for groundwater injection and extraction in lieu of or in addition to new recharge basins
Recycled Water Facilities (City of Fresno Recycled Water Master Plan)	• Improvements to the existing Regional Wastewater Reclamation Facility (RWRF) and construction of satellite and/or stand-alone Wastewater Treatment Plants (WWTP) to produce tertiary treated recycled water for non-potable uses including landscape irrigation to offset potable water demands [a] • Recycled water storage facilities to serve peak demands [a] • Extensive new recycled water transmission and distribution system pipelines to distribute recycled water supplies from the RWRF/WWTPs to customers [a]
Water Conservation	• Implement a tiered water rate structure as soon as possible to further encourage water conservation; • Require new development to offset a portion of their required supply needs by implementing conservation measures (anticipated to provide a five percent demand reduction); • Establish aggressive water conservation goals/policies for new construction; • Establish more efficient exterior water use goals/policies for existing users including water conservation measures specifically geared towards reducing water use for landscape and turf irrigation; • Provide additional staff and program-specific financial resources required to implement and manage conservation programs (e.g., grant writer, CII conservation representative); • Maintain compliance with CVP Contract including the Best Management Practices (BMP) requirements; and • Update the City's Urban Water Management Plan (UWMP) every five years per State requirements.

a. These facilities have undergone environmental review and will not be evaluated in the Metro Plan Update EIR.

1.7 Schedule

The estimated implementation schedule for both near-term and future projects of the proposed Metro Plan Update is shown in **Table 1-9**. The timing of the individual infrastructure components of the Metro Plan Update will ultimately depend on the need for additional water supply capacity and the availability of funding.

TABLE 1-9
PROPOSED SCHEDULE FOR IMPLEMENTATION OF THE METRO PLAN UPDATE

Infrastructure Component	Construction Period
Surface Water Treatment Facilities	• 2015-2018: 80 mgd SE SWTF • About 2020: Expanded (60 mgd) NE SWTF • About 2025: New SW SWTF
Potable Water Transmission Facilities	• 2014-2018: Major transmission pipelines to distribute treated water from new SE SWTF • 2016-2020: Major transmission pipelines to distribute treated water from expanded NE SWTF • About 2025: Major transmission pipelines to distribute treated water from new SW SWTF
Potable Water Storage Facilities	• 2015-2025
Groundwater Facilities	• 2014-2025: New wells, wellhead treatment, groundwater storage/recharge facilities
Recycled Water Facilities (Recycled Water Master Plan)	• 2015-2025: Recycled water treatment and distribution facilities (treatment and distribution)
Water Conservation	• 2014-2025: Implement additional water conservation measures to reduce water use

1.8 CEQA Process

The EIR will be prepared in compliance with California Environmental Quality Act (CEQA), Public Resources Code Sec 21000 et seq., and the CEQA Guidelines, as amended. The City will be the lead agency for the CEQA process. In accordance with CEQA, the lead agency has the responsibility for the scope, content, and legal adequacy of the document.

A Notice of Preparation (NOP) as required by CEQA will be sent to interested agencies to solicit their comments on the project. The NOP will include a project description, location of the project, alternatives, possible environmental impacts, and the date and time of known future meetings on the project. The scoping meeting(s) will provide other agencies the opportunity to bring to the attention of the lead agencies significant issues that should be included in the EIR. Agencies will have 30 days to tender their comments.

The draft EIR will incorporate public concerns associated with the project alternatives identified in the scoping process and will be distributed for at least 45-day public review and comment period. During this time, both written and verbal comments will be solicited on the adequacy of the document. The final EIR will address the comments received on the draft during public review and will be made available to all commenters on the draft EIR and anyone requesting a copy during the 45-day public review period. The final EIR will (1) provide a full and fair discussion of the proposed actions significant environmental impacts, and (2) inform the decision-makers and the public of

reasonable measures and alternatives that would avoid or minimize adverse impacts or enhance the quality of the environment.

The final step in the EIR process is certification of the EIR, which includes preparation of a Mitigation Monitoring and Reporting Plan and adoption of its findings, should the project be approved. A certified EIR indicates the following: (1) The document complies with CEQA; (2) the decision-making body of the lead agency reviewed and considered the final EIR prior to approving the project; and (3) the final EIR reflects the lead agency's independent judgment and analysis. In addition, a Notice of Determination (NOD) describing the project, its impacts and adopted mitigation, the environmental findings of the agency, and the location of copies for examination is filed with the Fresno County Clerk.

1.9 Regulatory Requirements, Permits and Approvals

In addition to meeting CEQA requirements, proposed project(s) will be required to obtain federal, state and local permits and regulatory approvals. It is possible that construction projects to be implemented as part of the Metro Plan Update could require, depending upon the environmental resources identified on or near project sites and water pipeline alignments, authorization from the following agencies:

- Federal –U.S. Army Corps of Engineers (wetlands), U.S. Fish and Wildlife Service (terrestrial species), and National Marine Fisheries Service (aquatic species)
- State –Central Valley Regional Water Quality Control Board (water quality certificate), California Department of Fish and Wildlife (streambed alteration permit), Central Valley Flood Protection Board (floodplains), California Department of Transportation (highway crossings), California Department of Conservation (important farmlands), San Joaquin Valley Unified Air Pollution Control District, and potentially the California Native American Heritage Commission and the State Office of Historic Preservation
- Local – Fresno County and special districts
- City of Fresno – entitlements, such as a Conditional Use Permit, for water facilities

Additional approvals for project construction and operation would also be required for implementation of all the project alternatives. The approvals listed below are considered distinct from permits because they are not required by resource agencies for protection of natural and cultural resources. Examples of approvals, possibly using eminent domain for purchase of land or easements, that would need to be negotiated include:

- Temporary construction easements along and across local roadways – public and private property owners along pipeline alignments
- Temporary right-of-way borings – California Department of Transportation, Union Pacific Railroad company, Fresno County
- Operational agreements – FID and FMFCD
- Acquisition of land and utility rights-of-way through purchase or condemnation, if necessary

The agencies and organizations responsible for issuing project approvals would consider the information presented in the EIR during their deliberations.