CITY OF FRESNO RECYCLED WATER MASTER PLAN AND ORDINANCE

Notice of Preparation and Initial Study

Prepared for
City of Fresno

May 2010
CITY OF FRESNO RECYCLED WATER MASTER PLAN AND ORDINANCE

Notice of Preparation and Initial Study

Prepared for
City of Fresno

May 2010
NOTICE OF PREPARATION
City of Fresno Recycled Water Master Plan and Ordinance

Date: May 3, 2010
To: California Office of Planning and Research, Responsible and Trustee Agencies, Cities and Counties bordering the City of Fresno, and other Interested Parties
From: Stephen Hogg, Assistant Director for the Department of Public Utilities, Wastewater Management Division
Subject: Notice of Preparation of a Draft Environmental Impact Report

Project Title: City of Fresno Recycled Water Master Plan and Recycled Water Ordinance

The City of Fresno will be the Lead Agency to prepare a Program Environmental Impact Report (Program EIR) for the City of Fresno Recycled Water Master Plan and Recycled Water Ordinance (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 Program EIR.

The overall objective of the Recycled Master Plan is to supply recycled water to meet the demands of existing and future customers through buildout of the General Plan in 2025. The study area for the Master Plan includes the existing city limits and City of Fresno Sphere of Influence area designated by the 2025 Fresno General Plan (see attached Figure 1). The objective of the Recycled Water Ordinance is to establish criteria for required and voluntary use of recycled water for approved uses and to establish requirements for the installation of recycled water infrastructure within developing areas.

The City of Fresno proposes to implement a Recycled Water Master Plan with an associated Recycled Water Ordinance to increase the use of recycled water to meet local water demands. The Master Plan will be implemented in a phased manner through 2025 as feasible based on technical, funding, partnering, and other factors. The Master Plan will inform the City’s decision process in selecting recycled water projects. The expansion of the recycled water system will enable the City to offset potable water use, enhance the sustainability of the water supply, and reduce the use of percolation ponds that currently handle effluent discharge. The City intends to adopt a Recycled Water Ordinance to further support recycled water development. The Ordinance will assist in implementation of the proposed project, by encouraging and in other cases requiring use of recycled water. The proposed project is a key element of the City’s overall water supply planning strategy to meet increasing need for treated wastewater effluent disposal and water demands.
The Notice of Preparation and Initial Study (NOP/IS) will be used as a scoping document to focus the EIR. The EIR will be designed to function as a program-level EIR for the Master Plan and the Recycled Water Ordinance.

According to the CEQA Guidelines Section 15082(b), within 30 days after receiving a notice of preparation, each responsible and trustee agency and the Office of Planning and Research shall provide the lead agency with specific detail about the scope and content of the environmental information related to the responsible or trustee agency's area of statutory responsibility that must be included in the draft EIR. The response at a minimum shall identify: (A) The significant environmental issues and reasonable alternatives and mitigation measures that the responsible or trustee agency, or the Office of Planning and Research, will need to have explored in the draft EIR; and (B) Whether the agency will be a responsible agency or trustee agency for the project.

A copy of the NOP/IS for the proposed project is attached or can be found at these locations:

- City of Fresno City Hall, 2600 Fresno Street, 3rd Floor, Room 3065, Public Utilities Department Administration, Fresno CA 93721
- County of Fresno Central Library, 2420 Mariposa Street, Fresno CA 93721

Written responses including any questions or comments must be received no later than 30 days after publication of this notice, by 5:00 p.m. on June 9, 2010. Please send your written responses to:

Kevin Norgaard, Chief of Technical Services
Wastewater Management Division
Fresno-Clovis Regional Water Reclamation Facility
5607 West Jensen Avenue, Fresno CA 93706
Phone: (559) 621-5297
Email: Kevin.Norgaard@Fresno.gov

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, a public scoping meeting for all interested parties will be held as follows:

- **Monday, May 24, 2010 from 6:00 p.m. to 8:00 p.m. in the Fresno City Hall Council Chambers located at 2600 Fresno Street, Fresno CA 93721**

If you have any questions regarding this matter, please contact Kevin Norgaard, Wastewater Management Division at the Fresno-Clovis Regional Water Reclamation Facility, 5607 West Jensen Avenue, Fresno, CA 93706. Phone: (559) 621-5297; Email: Kevin.Norgaard@Fresno.gov You may also contact Mike Sanchez, Planning Manager, City of Fresno Planning and Development Department, at (559)621-8040 or via email at Mike.Sanchez@Fresno.gov.
# TABLE OF CONTENTS

City of Fresno Recycled Water Master Plan and Ordinance - Notice of Preparation and Initial Study

<table>
<thead>
<tr>
<th>Notice of Preparation</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>i</td>
</tr>
</tbody>
</table>

## 1. Initial Study Background Information
- 1-1

## 2. Project Description
- 2-1
  - 2.1 Introduction
  - 2.2 Project Objectives, Planning Horizon and Location
  - 2.3 Project Background
  - 2.4 Description of Proposed Project Elements
  - 2.5 Project Implementation Schedule
  - 2.6 CEQA Process
  - 2.7 Regulatory Requirements, Permits and Approvals

## 3. Environmental Effects
- 3-1
  - 3.1 Environmental Factors Potentially Affected
  - 3.2 Environmental Checklist
    - Aesthetics
    - Agricultural Resources
    - Air Quality
    - Biological Resources
    - Cultural Resources
    - Geology, Soils, and Seismicity
    - Hazards and Hazardous Materials
    - Hydrology and Water Quality
    - Land Use and Land Use Planning
    - Mineral Resources
    - Noise
    - Population and Housing
    - Public Services
    - Recreation
    - Transportation and Traffic
    - Utilities and Service Systems
    - Energy and Climate Change
    - Mandatory Findings of Significance

## List of Figures
- 2-1 Regional Locations
- 2-2 RWRF and North Fresno WRF Locations
- 2-3 Overview of Potential Recycled Water Distribution Systems
# SECTION 1

## Initial Study Background Information

1. **Project Title:** City of Fresno Recycled Water Master Plan and Recycled Water Ordinance

2. **Lead Agency Name and Address:**
   - City of Fresno City Hall, 2600 Fresno Street, 3rd Floor, Room 3065, Public Utilities Department Administration, Fresno CA 93721

3. **Contact Person and Phone Number:**
   - Kevin Norgaard, Chief of Technical Services
     - Wastewater Management Division
     - Fresno-Clovis Regional Water Reclamation Facility
     - 5607 West Jensen Avenue, Fresno CA 93706
     - Phone: (559) 621-5297
     - Email: Kevin.Norgaard@Fresno.gov

4. **Project Location:** City of Fresno existing city limits and Fresno Sphere of Influence (2025 Fresno General Plan)

5. **Project Sponsor's Name and Address:**
   - Stephen Hogg, Assistant Director for the Department of Public Utilities,
     - Wastewater Management Division
     - Fresno-Clovis Regional Water Reclamation Facility
     - 5607 West Jensen Avenue, Fresno, CA 93706
     - Phone: (559) 621-5100
     - Email: Steve.Hogg @Fresno.gov

6. **General Plan Designation(s):** Various

7. **Zoning Designation(s):** Various
SECTION 2

Project Description

2.1 Introduction

The project analyzed in this Initial Study (IS) is the proposed Fresno Recycled Water Master Plan and Ordinance (proposed project). The City of Fresno Department of Water Utilities, Wastewater Division proposes to implement a Recycled Water Master Plan with an associated Recycled Water Ordinance to increase the use of recycled water to meet local water demands. The Master Plan will be implemented in a phased manner through 2025 as feasible based on technical, funding, partnering, and other factors. The Master Plan will inform the City’s decision process in selecting recycled water projects. The expansion of the recycled water system will enable the City to offset potable water use, enhance the sustainability of the water supply, and reduce the use of percolation ponds that currently handle effluent discharge. The proposed project is a key element of the City’s overall water supply planning strategy to meet existing and future water demands.

Opportunities for recycled water use within existing and planned urban areas of the City include golf courses, parks, cemeteries, schools, road medians, residential and commercial irrigation, and other large landscaped areas. Industrial reuse is being evaluated for cooling, boilers, irrigation and other applications where human contact would be minimal. Groundwater recharge, to supplement the City’s groundwater supplies, and agricultural reuse are also being evaluated.

The Recycled Water Master Plan identifies potential recycled water uses, general use locations, and evaluates the City’s recycled water use demand. It also discusses regulatory requirements, infrastructure needs, and alternative capital improvement scenarios. The proposed project involves planning and phasing of a regional recycled water distribution system that extends from the existing Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF) and includes conveyance pipelines, pump stations, and pressure regulating stations. Alternatively, the City could develop SRWFs, similar to the existing North Fresno Water Reclamation Facility, in addition to using its existing RWRF. Groundwater recharge basins and agricultural reuse could be used whether the City focuses on RWRF or SRWFs.

The City intends to adopt a Recycled Water Ordinance to further support recycled water development. The Ordinance will assist in implementation of the proposed project, by encouraging and in other cases requiring use of recycled water. Once adopted, the Ordinance would regulate both existing and new City water customers.
2.2 Project Objectives, Planning Horizon and Location

The proposed project would plan and implement a recycled water treatment and distribution system to help meet the increasing need for treated wastewater effluent disposal and water demands in the region. The proposed project will help support a broader water supply portfolio that includes recycled water. The proposed project would support the use of recycled water for various end uses and reduce regional demands for groundwater and surface water supplies. The proposed project would be consistent with California Water Code Sections 13575-13583 that sets state-wide recycled water use goals and standards.

As discussed in the City of Fresno Metro Plan Update Phase 1 Report \(^1\) (City of Fresno. 2007), the City would use approximately 150,000 acre-feet per year of stored groundwater by 2025 during a normal hydrologic year if it continues to meet increasing water demands from the underlying Kings groundwater sub-basin, which is part of the greater San Joaquin Valley Groundwater Basin. With already declining groundwater levels, each year that the City continues to operate in this mode would continue to accelerate groundwater level declines in the basin, and further impact groundwater resources in the region. The use of recycled water for non-potable water uses is a likely source to help meet a significant part of the City’s additional water supply demands.

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 2-1). 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 fifth largest city in California, and currently encompasses 110 square miles in geographic area.

The project area for the proposed project includes the existing Fresno city limits and City of Fresno Sphere of Influence (SOI) area designated by the 2025 Fresno General Plan.

2.3 Project Background

2.3.1 Existing Wastewater Treatment Facilities and Recycled Water Use

The City has two existing wastewater treatment facilities (see Figure 2-2). It currently treats approximately 77,000 acre-feet of wastewater per year (AFY) at its Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF) to an undisinfected secondary level of treatment. Some of this water is directly recycled, but most of it is percolated in ponds located at the RWRF, located southwest of the City. A portion of the water percolated into the ponds is later extracted and delivered to the Fresno Irrigation District (FID) for use by local farmers. The City and FID have an agreement whereby the City may discharge up to 30,000 AFY of extracted groundwater into FID’s canals. The percolated water that is not extracted remains in the groundwater basin, where it migrates laterally to the southwest. The majority of the remaining percolated water could be extracted and beneficially used in other areas. The RWRF’s current recycled water activities are further described, below.

Figure 2-1

Regional Location

SOURCE: DeLorme Street Atlas USA, 2000; and ESA, 2009
Figure 2-2
RWRF and North Fresno WRF Locations

SOURCE: Carollo Engineers, 2010; and ESA, 2010
A water reclamation facility (WRF) located in north Fresno was recently built to serve the Copper River Ranch development and golf course. The permitted capacity of the plant is 0.71 mgd (average monthly flow) and 1.08 mgd (maximum daily flow). The plant is master planned for expansion to 1.25 mgd (average monthly flow) at buildout. Disinfected tertiary recycled water from the North Fresno WRF is to be used to irrigate the Copper River Ranch Golf Course and other landscapes in the area. The golf course is within the City Limits of Fresno. Currently, the golf course is irrigated almost exclusively with surface water provided by FID, and supplemented with a minimal amount from an agricultural well. During wet weather months, recycled water in excess of turf demands will be dechlorinated and sent to a nearby percolation basin owned and managed by the Fresno Metropolitan Flood Control District (FMFCD), and could be used to irrigate landscaped areas within the basin. Projected recycled water use for the North Fresno WRF ranges from about 750 af/yr to about 1,250 af/yr at buildout.

The RWRF has a treatment capacity of approximately 80 mgd (annual monthly average daily discharge flow). It provides secondary wastewater treatment with effluent disposal to a combination of percolation ponds and irrigation reuse (no effluent from the RWRF is discharged to surface water). The facility consists of a headworks followed by primary settling and the secondary activated sludge biological treatment processes. The facility has the capability of incorporating the old trickling filter plant into the process to augment the activated sludge process.

Secondary effluent from the RWRF is discharged into a canal system feeding a series of percolation ponds, and local farmers utilize a portion of the effluent (about 10 percent) for direct reuse on agricultural land. In 2007, the RWRF delivered 10,935 acre feet (af) to neighboring farmland for irrigation of feed, fodder and fiber crops. The City also reclaims a portion of the previously percolated effluent by extracting it and delivering it to FID for FID’s conveyance system for use downstream of the RWRF. The RWRF extracted 27,000 af of water from below the percolation ponds in 2007 for a total recycled water use of about 37,000 af². The City’s agreement with FID stipulates that, for every acre-foot of extracted groundwater the City discharges to the FID canals, the City is entitled to receive 0.46 AF of surface water from FID. The City has not historically used its full entitlement of surface water from this FID agreement due to lack of adequate facilities to treat or recharge the surface water. The agreement also states that the City will retain its effluent within the FID boundaries unless approval from FID is obtained.

The Central Valley Regional Water Quality Control Board (CVRWQWB) required the RWRF to identify waste constituents that threaten to degrade the groundwater. The “Best Practical Treatment and Control Comprehensive Evaluation” was submitted in December 2009. Constituents of concern are salts, nitrogen and metals (arsenic and manganese) that are mobilized from the alluvium by reducing conditions created by effluent percolation. Reducing the hydraulic and constituent loading burden on the percolation ponds by implementing a significant reuse program would potentially reduce the concentrations of these constituents in the groundwater.

In addition to water quality considerations, the City is interested in maximizing reuse as much as feasible to improve the sustainability of the water supply. Many of the reuse options considered could offset existing uses of the City’s potable supplies and some selected private wells, all of which

---

extract flows from the same groundwater basin. Other options could exchange the recycled water with other agencies for potable water credit. Groundwater recharge with recycled water would supplement potable water supplies and provide a barrier to prevent groundwater migration away from the City.

2.4 Description of Proposed Project Elements

As noted in the Introduction, the proposed project involves both a Recycled Water Master Plan (Master Plan) and a Recycled Water Ordinance (Ordinance). This section provides a description of the City’s program elements under the proposed project.

2.4.1 Recycled Water Master Plan

In an effort to meet the project objectives listed above, the Recycled Water Master Plan evaluates a wide range of options for implementing reuse, lessening discharge at the RWRF, and offsetting potable use within the City. The Master Plan examines urban reuse, agricultural reuse, groundwater recharge, and institutional exchanges of recycled water for potable water. Serving existing water users is the primary focus of the Master Plan, although future development opportunities have also been considered. As possible, reuse options have been quantified as to the amount of water that can be reused, potable offsets, and volume diverted from disposal at the RWRF. These quantified volumes are then used to determine the cost-effectiveness of implementing various alternatives and developing a prioritization for implementation.

Urban reuse, composed of the following uses for recycled water, has the most potential to offset groundwater overdraft throughout the City by providing a water supply alternative to groundwater and surface water demands.

- Irrigation of public and private landscaped areas.
- Heating and cooling in industrial buildings.
- Industrial laundries.
- Dual plumbing for toilet flushing in condominiums and institutional buildings.
- Ornamental lakes.
- Public and private ornamental fountains.

Although these are all possible uses for recycled water, some are extremely costly and/or difficult to implement. Installation of a recycled water distribution system (“purple pipe”) can be expensive, especially through a built-out area, and potential demands need to be sufficiently large to warrant it.

The focus of the Recycled Water Master Plan is on providing recycled water to existing and planned (per the Fresno 2025 General Plan) irrigation users such as schools, parks, cemeteries and golf courses. Irrigation reuse is the largest potential existing potable offset. In general, golf courses are the largest application for irrigation reuse, followed by parks, schools and large water features. Future implementation of the Master Plan would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities to provide recycled water to the irrigation users listed above as well as residential and commercial common areas.
The types of reuse being evaluated include urban reuse, groundwater recharge and agricultural reuse. For urban reuse, the City has been divided into quadrants to facilitate the configuration of project alternatives. For Alternative 1 urban reuse, each quadrant of the City would largely be served by recycled water delivered from the RWRF. Under Alternative 2, in lieu of implementing a project using only the RWRF, the City of Fresno would design, construct, and operate satellite recycled water facilities (SRWFs) for urban reuse. Alternative 2 would result in as many as four recycled water facilities in the City instead of a single treatment system largely connected to the RWRF as discussed for Alternative 1. Under Alternative 2, the satellite facilities and RWRF would not necessarily be independent of each other. An overview of the areas that could be served by recycled water is presented in Figure 2-3. Figure 2-3 shows the potential buildout of a recycled water system that interconnects both the RWRF and SRWFs.

The RWRF currently provides only secondary treatment, and does not produce a wastewater effluent that is suitable for Title 22 unrestricted use for landscape irrigation (i.e., tertiary treatment). In the future, if wastewater is to be treated to a tertiary level at the RWRF, additional filtration, disinfection, and possibly nitrogen removal or high level treatment facilities would need to be constructed at the RWRF.

Groundwater Recharge Reuse Projects (GRRPs) are incorporated as part of urban reuse project alternatives where feasible. However, due to the lengthy permitting process, GRRPs will likely be phased in over time. The reuse demand (and potable water offset) that can be achieved by implementing GRRPs would be above and beyond the estimated urban demand and is dependent on the land area secured for recharge. Implementation of GRRPs could require higher levels of treatment.

Agricultural reuse options are also included in the alternatives being evaluated. These options included expanding deliveries of undisinfected secondary effluent, expanding pumping of percolated effluent, and upgrading the RWRF to tertiary treatment to make recycled water for unrestricted reuse. Pipelines for alternatives were sized for the urban users listed in each of the quadrants. There would be some economy of scale to combine delivery of agricultural users with urban users, so pipes would need to be resized if agricultural alternatives were selected.

### 2.4.2 Recycled Water Ordinance

In conjunction with the planned review, approval and implementation of a City Recycled Water Master Plan, the City intends to adopt a Recycled Water Ordinance to support implementation of recycled water activities. Similar ordinances, frequently called “purple pipe ordinances” due to the color that identifies recycled water pipes, are being implemented throughout California and the United States. Environmental effects of the draft Ordinance will be assessed in conjunction with the Master Plan evaluation.
Figure 2-3
Overview of Potential Recycled Water Distribution Systems

SOURCE: Carollo Engineers, 2010; and ESA, 2010
The Ordinance will assist in implementation of the proposed project, by encouraging and in other cases requiring use of recycled water. Once adopted, the Ordinance would regulate both existing and new City water customers. The proposed ordinance, currently under development, would include a requirement for customers to use recycled water in locations where recycled water is available and the use of non-potable water is approved. The requirements for use of recycled water would be specified for various types of properties in the City of Fresno Sphere of Influence:

- New, existing and remodeled commercial properties
- New and existing industrial properties
- New and existing institutional and governmental use
- New, existing and remodeled residential uses – apartments and condominiums
- New and existing residential Uses – single family residential homes
- New and existing home owners associations and open space areas

For new subdivisions and other land use development, there may also be requirements to install recycled water transmission and distribution infrastructure, both on and off-site, as a condition of development approval.

### 2.5 Project Implementation Schedule

The project would be implemented in phases to accommodate funding, technical, administrative and scheduling factors. Figure 2-3 shows full system buildout. Construction of the first phase could begin in 2011 and the last phase as late as 2025, in association with buildout of the 2025 General Plan.

Actual construction schedules would be determined as funds become available, as recycled water users are identified, and as new areas are developed. Construction for pipelines would proceed at 50 to 100 feet per day with some phases taking up to a year to complete. Storage reservoirs and pump stations, once under construction, would require eight to nine months to complete.

### 2.6 CEQA Process

A Program EIR to evaluate the proposed project 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. The analyses in this Program EIR are intended to provide program-level coverage for the Master Plan and Ordinance (proposed project elements), described above. All project elements evaluated at a program level require additional environmental analysis and documentation prior to construction and operation in order to be in compliance with CEQA.

This Notice of Preparation (NOP) as required by CEQA will be sent to interested agencies to solicit their comments on the project. The NOP includes a project description, location of the project, alternatives, possible environmental impacts, and the date and time of a future meeting on the project. The scoping meeting 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 human 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.
The expected schedule for the Fresno Recycled Water Master Plan and Ordinance CEQA process is
anticipated to be 8 to 9 months.

2.7 Regulatory Requirements, Permits and Approvals

In addition to meeting CEQA requirements, the proposed project 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 Recycled Water Master Plan and Recycled Water Ordinance 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 (CVWB water quality
certificate), California Department of Fish and Game (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, including – FID and FMFCD
- City of Fresno – entitlements for water re-use facilities

Additional approvals for project construction and operation would also be required for implementation
of all the project alternatives. These 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 FMFCID
- 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.
SECTION 3
Environmental Effects

3.1 Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

- Aesthetics
- Biological Resources
- Hazards and Hazardous Materials
- Mineral Resources
- Public Services
- Utilities and Service Systems
- Agriculture Resources
- Cultural Resources
- Hydrology and Water Quality
- Noise
- Recreation
- Energy and Climate Change
- Air Quality
- Geology, Soils and Seismicity
- Land Use and Land Use Planning
- Population and Housing
- Transportation and Traffic
- Mandatory Findings of Significance

The Section 3 discussion of the Recycled Water Master Plan and Ordinance environmental effects addresses potential impacts of the proposed project described in Section 2, Project Description.

DETERMINATION:
On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Signature

Date

Kevin Morgan

Printed Name

City of Fresno, California

City of Fresno Recycled Water Master Plan and Ordinance Notice of Preparations/Initial Study

3-1

ESA / 209405
May 2010
3.2 Environmental Checklist

Aesthetics

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AESTHETICS—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Have a substantial adverse effect on a scenic vista?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway corridor?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Substantially degrade the existing visual character or quality of the site and its surroundings?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

a, d) Future implementation of the Recycled Water Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. These facilities, including recharge basins that could be located outside of urban areas of the City, have the potential to affect scenic views and vistas. These areas are characterized by agricultural fields, farm buildings and rural residences. Views in the area include surrounding rural land uses as well as distant views of the Sierra Nevada. The potential development of as many as four new satellite recycled water facilities (SRWFs) as well as upgrades to the existing Regional Water Reclamation Facility (RWRF) could result in long-term changes to the visual character in their respective locations. Other potential visual effects would occur in residential neighborhoods during construction of facilities including recycled water pipelines and booster pump stations, due to the presence and operation of construction equipment and materials, fencing, and roadway operation changes. These areas are characterized by single- and multi-family homes, various public schools (elementary, middle and high schools), and neighborhood shops and business. Some areas include commercial and light industrial uses, as well. Due to the relatively flat topography of Fresno, some of these areas also include views of the Sierra Nevada. Once construction is completed and the various facilities and pipelines are operational, new visual elements (utility buildings, pump stations and other facilities) with lighting may be added to the landscape, and these changes could alter the visual character of project sites and their surrounding areas. These impacts are potentially significant and will be addressed in the EIR.

b) Within Fresno County, Highways 168 and 180 are designated state scenic highways. However the designation does not cover portions of these highways within the Fresno urban limits or within the plan area. Additionally, there are local scenic (agri-tourism) trails in Fresno.
County including the well-known Blossom Trail, but these also do not extend into the City of Fresno urban limits. Aesthetic impacts within a state scenic highway corridor would therefore be less than significant. This will not be addressed further in the EIR.

c) Light and glare can be generated by daytime and nighttime lighting and reflective surfaces. Elements of the Recycled Water Master Plan and Ordinance, which includes the potential for as many as four new SWRFs, would include daytime and nighttime lighting during construction and operation. Upgrades to the existing RWRF to produce tertiary treated water would include use of some reflective materials (window glass, various paints, etc.). Vehicles associated with operation of the facilities would also contribute to light (from headlights) and glare (from reflective surfaces). The potential for light and glare is a potentially significant visual effect and will be addressed in the EIR.
Agricultural Resources

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. AGRICULTURAL RESOURCES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</td>
<td>☒</td>
<td></td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</td>
<td>☒</td>
<td></td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland of Statewide Importance to non-agricultural use?</td>
<td>☒</td>
<td></td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a-c) Implementation of the proposed Recycled Water Master Plan and Ordinance would occur primarily within the urbanized Fresno city limits; however some potential elements (including recharge basins) would be located outside the urban edge on lands that are currently or historically agricultural in nature. Within the City of Fresno SOI there is Important Farmland (i.e. –prime, unique, and farmland of statewide importance) as well as land contracted under the Williamson Act Program. Some elements of the Master Plan have the potential to convert Important Farmland and/or lands in the Williamson Act program to non-agricultural use. Also, there is the potential for implementation of the Master Plan and Ordinance to support urban growth or result in other indirect changes in the existing environment that could result in conversion of farmland to non-agricultural uses. Both direct and indirect impacts related to agriculture are potentially significant and will be addressed in the EIR.
Air Quality

3. AIR QUALITY
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan? ☒ ☐ ☐ ☐

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? ☒ ☐ ☐ ☐

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ☒ ☐ ☐ ☐

d) Expose sensitive receptors to substantial pollutant concentrations? ☒ ☐ ☐ ☐

e) Create objectionable odors affecting a substantial number of people? ☒ ☐ ☐ ☐

Discussion

a-e) Pursuant to the 1990 Federal Clean Air Act Amendments (FCAA), the United States Environmental Protection Act (EPA) classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether or not the National Ambient Air Quality Standards (NAAQS) had been achieved. In addition, under the California Clean Air Act (CCAA), areas have been designated as attainment or nonattainment with respect to the California Ambient Air Quality Standards (CAAQS). The San Joaquin Valley is designated nonattainment for federal and state 8-hour ozone and PM2.5 standards, as well as nonattainment for the state 1-hour ozone and PM10 standards. Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving volatile organic compounds (VOCs, also called reactive organic gases (ROG), such as xylene, and nitrogen oxides (NOx), such as nitric oxide. Major sources of ozone precursors include fuel combustion and solvent evaporation. Particulate matter in the atmosphere results from many kinds of aerosol-producing industrial and agricultural operations, fuel combustion, and atmospheric photochemical reactions. Some sources of particulate matter, such as demolition and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect.

Future implementation of the Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. Increased air emissions would result from the construction and operation of these facilities, resulting in potentially significant effects. Potential project
impacts to air quality include dust and other construction-related emissions and operational emissions from chemicals used for water treatment procedures. Construction emissions relate primarily to heavy equipment use and fugitive dust, while operational emissions include both stationary and mobile (motor vehicle) sources. The project also has the potential to create objectionable odors in the vicinity of project facilities due to the use of chemicals with distinct aromas (including chlorine). The project is located within the jurisdictional area regulated by the San Joaquin Valley Air Pollution Control District (SJVAPCD). Impacts to air quality and odors are potentially significant. These topics will be addressed in the EIR.
3. Environmental Effects

4. Biological Resources

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a-d) Future implementation of the Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. Facilities would occur primarily within the urbanized Fresno city limits; however some potential elements (including recharge basins) would be located outside the urban edge on lands that are currently or historically undeveloped or agricultural in nature. Due to the extensive and diverse nature of the project area, a variety of habitat types are present. Changes to these habitats have the potential to affect special status species and migratory movement of native species. Additionally, the presence of streams and other waters throughout the proposed project area indicate that the project may have the potential to impact riparian habitats and wetlands including vernal pools (a type of wetland). Many of these potential impacts would be site specific direct impacts based on the placement of future facilities, while others may be long-term or indirect habitat modification caused during construction or through groundwater resources development. Once identified, site specific
impacts may be avoided by adjusting project facility footprints. These impacts to biological resources are potentially significant and will be addressed in the EIR.

e-f) The 2025 Fresno General Plan\(^1\) includes policies related to native plants and wildlife that supports cooperative, multi-jurisdictional approaches for area-wide habitat conservation plans. Although there is no City of Fresno Habitat Conservation Plan, Natural Community Conservation Plan or tree preservation ordinance protecting biological resources, the 2025 Fresno General Plan contains multiple policies that promote conservation and protection of biological resources in development projects. Additional policies support adherence to federal and state regulations and mitigation for adverse impacts, including impacts on aquatic life due to cumulative storm water discharges. Potential conflict with local plans and policies is a potentially significant impact and will be addressed in the EIR.

\(^1\) City of Fresno, *City of Fresno 2025 General Plan*, 2002.
Cultural Resources

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. CULTURAL RESOURCES—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?</td>
<td>☒</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?</td>
<td>☒</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</td>
<td>☒</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Disturb any human remains, including those interred outside of formal cemeteries?</td>
<td>☒</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

a) Future implementation of the Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. These facilities would primarily be located within the urbanized Fresno city limits. Historical resources including National Register, State Register, and locally designated historic buildings and structures may be located within ¼ mile of prospective facilities such as potential recycled water distribution pipelines located within Fresno urban limits. Additional analysis will be required to determine the impact that the proposed project could have on these previously identified resources. Rural buildings are located in areas that may be proposed for recharge basins, and these structures may require future evaluation to determine the age and potential eligibility for listing on local, state, or national registers of historic resources. This impact is potentially significant and will be addressed in the EIR.

b-c) Due to the broad geographic extent of the Master Plan and Ordinance project area and likely amount of earth disturbance during future, phased construction, it is possible that significant undiscovered archaeological or paleontological resources could be found within the project area. Many indigenous cultures once occupied various sites within Fresno County, including numerous Native American tribes. Additionally, multiple paleontological discoveries have occurred within Fresno County. Earthmoving activities associated with the construction of the project elements may result in a significant impact to previously undiscovered resources. These impacts are potentially significant and will be addressed in the EIR.

d) Human remains, including those interred outside of formal cemeteries, can be disturbed during excavation and earthmoving activities such as that anticipated for future phases of Master Plan and Ordinance implementation. This impact is potentially significant and will be addressed in the EIR.
## Geology, Soils, and Seismicity

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. GEOLOGY, SOILS, AND SEISMICITY—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>ii) Strong seismic ground shaking?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>iii) Seismic-related ground failure, including liquefaction?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>iv) Landslides?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b) Result in substantial soil erosion or the loss of topsoil?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

### Discussion

Future implementation of the Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. It is not anticipated that Master Plan-related facilities would occur near the bluffs along the San Joaquin River.

a.i) According to the 2025 Fresno General Plan (City of Fresno Planning and Development Department, 2002), the City of Fresno is located in one of the more geologically stable areas of California, in Seismic Safety Zone III, containing no Alquist-Priolo Earthquake Fault Zones. This impact is considered less than significant and will not be evaluated further in the EIR.
3. Environmental Effects

a.ii-iii) Fresno, located in the southern San Joaquin Valley, is on a deep alluvial basin and may be affected by strong seismic events in, or near, the east and west ends of Fresno County. This seismic impact is potentially significant and will be addressed in the EIR.

a.iv) Fresno is located in an area that has a predominately flat topography. Landslides primarily occur in coastal and mountainous regions with steep topography. However, they can also occur in areas of generally low relief. In low-relief areas, landslides occur as cut-and-fill failures (roadway and building excavations), river bluff failures, lateral spreading landslides, collapse of mine-waste piles (especially coal), and a wide variety of slope failures associated with quarries and open-pit mines. Because future phases of the project would involve excavation and substantial earth-moving activities during construction, this impact, although not anticipated, could be potentially significant and will be addressed in the EIR.

b) Future, phased construction activities will include removal of vegetation; excavation and removal of soil from construction sites; and grading activities. These activities have the potential to result in soil erosion and loss of topsoil. This impact is potentially significant and will be addressed in the EIR.

c) As noted in a.ii-a.iv, the project has the potential to result in hazards associated with landslides, spreading, etc. Because future implementation of the proposed project would involve excavation and earth-moving activities during construction, this impact is potentially significant and will be addressed in the EIR.

d) In the northern portion of the Fresno SOI, there are some areas of expansive clay soil which require special construction standards for foundations and infrastructure. This impact is potentially significant and, as applicable to implementation of the proposed project, will be addressed in the EIR.

e) The project does not include septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact. This topic will not be addressed further in the EIR.

Hazards and Hazardous Materials

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. HAZARDS AND HAZARDOUS MATERIALS Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

Future implementation of the Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. These facilities would primarily be located within the urbanized Fresno city limits however some facilities such as recharge basins could be located in and near rural and agricultural areas such as those near the RWRF.

a-b) Future, phased construction of the proposed project would involve use of substances that may be considered hazardous. Additionally, numerous hazardous chemical substances are used during the operation of wastewater treatment facilities. Accidents during construction and operation would also represent a potential hazard to the public and environment. This impact is potentially significant and will be addressed in the EIR.
c) The proposed project will include a system of new distribution pipelines and other recycled water facilities that would be constructed throughout the greater Fresno area. Construction of pipelines and other elements of the project are likely to occur near one or more existing or proposed schools. This impact is potentially significant and will be addressed in the EIR.

d) Numerous Leaking Underground Storage Tanks (LUSTs) are located within the Fresno and Clovis metropolitan areas (Fresno County, 2000). Other types of listed hazards sites may also occur. Excavation and earth-moving activities may disturb hazardous sites. This impact is potentially significant and will be addressed in the EIR, including evaluation of a hazardous records search.

e-f) Several of the Master Plan project sites are located near Fresno’s airports and private airstrip. Specifically, project elements and construction areas may be located within the planning areas of Fresno Yosemite International Airport, Fresno Chandler Downtown Airport, and the Sierra Sky Park. These impacts are potentially significant and will be addressed in the EIR.

g) Construction of project elements, especially distribution pipelines, may interfere with traffic flow and roadway use. This could physically interfere with emergency vehicle access and evacuation routes. This impact is potentially significant and will be addressed in the EIR, in the discussion of traffic and transportation (see Impact number 15e concerning adequacy of emergency access), below.

h) The majority of the project area is located within urbanized Fresno. However, some portions of the project area (specifically the recharge basins) are located in areas that are undeveloped or historically used for agriculture or other vegetated land uses. While these areas are not considered wildlands, fire hazards remain as potential impacts in these transition zones. This impact is potentially significant and will be addressed in the EIR.
## Hydrology and Water Quality

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. HYDROLOGY AND WATER QUALITY—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Violate any water quality standards or waste discharge requirements?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river or, by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f) Otherwise substantially degrade water quality?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

### Discussion

a) Future implementation of the Recycled Water Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. The Master Plan includes activities that would encourage and, in some cases require, increasing the use of recycled water for City water customers. Although the focus of the proposed project is to ensure the City meets all water quality standards, water quality impacts could result from construction of new facilities at existing or proposed recycled water facilities, or waste discharge associated with facility and pipeline construction. These activities will be addressed in the EIR.
b) Implementation of the Master Plan and Ordinance will result in increased use of recycled water in the City and its SOI to supplement the area’s water supply. A focus of the proposed project will be to protect groundwater supplies by reducing impacts associated with groundwater depletion (resulting from the City’s historical long-term over-use of groundwater). The proposed project and its potential impacts on groundwater supplies will be addressed in the EIR.

c - f) Future implementation of the Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. These facilities would primarily be located within the urbanized Fresno city limits however some facilities such as recharge basins could be located in and near rural and agricultural areas such as those near the RWRF. The EIR will evaluate potential stormwater, local drainage, and other hydrology-related impacts associated with the proposed project’s future construction and long-term operation of any new and upgraded WRFs. These impacts are considered potentially significant and they will be addressed in the EIR.

g-j) Implementation of the Master Plan could include placement of recycled water facilities, such as pump station structures, as well as construction of recharge basins (including berms) in flood hazard areas, and these potentially significant impacts will be addressed in the EIR. It is not anticipated that proposed project will result in exposing people or structures to inundation by seiche, tsunami or mudflows, therefore these impacts will not be evaluated in the EIR.
Land Use and Land Use Planning

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. LAND USE AND LAND USE PLANNING—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Physically divide an established community?</td>
<td>❌</td>
<td>✔</td>
<td>❌</td>
<td>✔</td>
</tr>
<tr>
<td>b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
<td>❌</td>
<td>✔</td>
<td>❌</td>
<td>✔</td>
</tr>
<tr>
<td>c) Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
<td>❌</td>
<td>✔</td>
<td>❌</td>
<td>✔</td>
</tr>
</tbody>
</table>

Discussion

a) The project area for the proposed project includes the existing city limits and City of Fresno SOI designated by the 2025 Fresno General Plan\(^3\). Future implementation of the Master Plan and Ordinance would primarily occur within the urbanized Fresno city limits however some facilities such as recharge basins could be located in and near rural and agricultural areas such as those near the RWRF.

Implementation of the Master Plan and Ordinance would not physically divide communities or neighborhoods within the City of Fresno urban limits or SOI. However, during future, phased construction of the distribution pipelines the proposed project has the potential to create a perceived division in the community due to the linear nature of the pipelines and their construction within residential streets. This impact is potentially significant and will be addressed in the EIR.

b) The proposed project will support changing the City from predominantly groundwater supply to a broader portfolio including recycled water. Therefore, the Master Plan and Ordinance could involve revision of land use plans and policies related to providing water to City residents. Because water-related facilities form the major elements of the proposed project, each technical section and related impact discussion of the EIR will evaluate land use-related effects associated with implementation of the Recycled Water Master Plan and Ordinance. In addition, potential conflicts with land use policies or regulations will be discussed in the Land Use and Planning section of the EIR.

c) As discussed in this document under Biological Resources (Impact 4e and 4f), above, the 2025 Fresno General Plan\(^4\) includes policies related to native plants and wildlife that support cooperative, multi-jurisdictional approaches for area-wide habitat conservation plans. Although there is no City of Fresno Habitat Conservation Plan, Natural Community Conservation Plan or tree preservation ordinance protecting biological resources, the 2025

---

\(^3\) City of Fresno, *City of Fresno 2025 General Plan*, 2002.
\(^4\) City of Fresno, *City of Fresno 2025 General Plan*, 2002.
Fresno General Plan contains multiple policies that promote conservation and protection of biological resources in development projects. Additional policies support adherence to federal and state regulations and mitigation for adverse impacts, including impacts on aquatic life due to cumulative storm water discharges. Potential conflict with local plans and policies is a potentially significant impact and will be addressed fully in the Master Plan EIR.
Mineral Resources

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. MINERAL RESOURCES—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a - b) According to the 2025 Fresno General Plan\(^5\), most of eastern Fresno County is included in the Fresno Production-Consumption (P-C) Region evaluated by California Department of Conservation (DOC) Division of Mines and Geology. Two river areas in the Fresno P-C have been given special Resource Area designation for their concentration of aggregate materials: the upper Kings River and the San Joaquin River. Deposits in these areas are known to be of high quality, may be relatively easily mined, and are close to consumers. A portion of the San Joaquin River Resource Area is located within the City of Fresno’s SOI. Although the Master Plan covers recycled water planning within the City’s entire SOI, no program or project facilities (WRFs, distribution pipelines, etc.) are planned to be located within the San Joaquin River Resource Area. Therefore, the project would not remove important mineral resources from that area, nor would it construct facilities over this resource area, preventing future resource excavation. This impact is less than significant and will not be addressed further in the EIR.

\(^5\) City of Fresno, *City of Fresno 2025 General Plan*, 2002.
3. Environmental Effects

Noise

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. NOISE—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>b) Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

Discussion

a, c, d) Future implementation of the Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. These facilities would primarily be located within the urbanized Fresno city limits however some facilities such as recharge basins could be located in and near rural and agricultural areas such as those near the RWRF. Increased noise associated with future construction and operation of these facilities could result in potentially significant effects. Future construction impacts would relate primarily to heavy equipment use, while operational emissions include both stationary (water pumps) and mobile (motor vehicle) sources and may cause ambient noise levels that conflict with noise exposure guidelines included in the 2025 Fresno General Plan (City of Fresno Planning and Development Department, 2002). Project activities could result in increased ambient noise levels in the vicinity of near-term and future project sites, including sites near schools, rest homes, residential and commercial areas and other identified sensitive receptors. Noise impacts are potentially significant and will be addressed in the EIR.

b) Groundborne vibration could be generated by future Master Plan and Ordinance-related construction activities such as soil compaction over pipelines. Although this is typically expected from pile driving or explosives use, some heavy equipment operated in close
proximity to buildings can also result in groundborne vibration. This impact is potentially significant and will be addressed to a programmatic-level in the EIR.

e-f) Some recycled water facilities may be located near Fresno area public and private airports or within two miles of the associated airport land use planning areas. Specifically, project construction areas may be located within the planning areas of Fresno Yosemite International Airport, Fresno Chandler Downtown Airport, and Sierra Sky Park, a private air strip. These noise impacts are potentially significant and will be addressed in the EIR.
Population and Housing

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. POPULATION AND HOUSING— Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Discussion**

a) No new home or business development is included in the Recycled Water Master Plan or Ordinance; however implementation of the proposed project could affect population and housing if water supply-related obstacles to growth are removed. This impact is potentially significant and an evaluation of the direct and indirect growth-inducement potential of the proposed project will be addressed in the EIR.

b-c) The proposed project would not displace substantial numbers of existing housing nor displace substantial numbers of people. Upgrades to the existing RWRF would occur at the existing City-owned property and construction of distribution pipelines is largely anticipated to occur within existing City rights-of-way. Other recycled water related activities are not expected to displace housing. However, future construction of new facilities such as SRWFs and recharge basins could occur on land that contains existing residences or rural housing that could be displaced by construction of the project. This impact is potentially significant and will be addressed in the EIR.
Public Services

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. PUBLIC SERVICES—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Fire protection?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>ii) Police protection?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>iii) Schools?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>iv) Parks?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>v) Other public facilities?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a.i-v) New or expanded fire protection, police protection, school and park facilities are not included as elements of the proposed project. Moreover, future recycled water facility construction is not anticipated to directly impact fire or police buildings, schools or park properties. However, implementation of the proposed Master Plan and Ordinance is intended to provide recycled water for landscape irrigation of schools and parks, which could affect those properties and persons using them: water quality issues will be addressed in the section on hydrology and water quality. Also, implementation of the proposed project could affect public services use if water supply-related obstacles to growth are removed. The removal of obstacles to growth can occur when infrastructure is enhanced or expanded in excess of what is needed for the current population or for growth that is planned in a local planning document (such as a general plan). Growth in excess of what is identified in local planning documents could result in unplanned need for additional public services or additional use of existing services. The EIR will provide a complete evaluation of the landscape irrigation and growth-inducement potential of the proposed project as compared to the planned growth in the study area and will address any potential growth-related impacts relating to provision of public services.
Recreation

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. RECREATION—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?</td>
<td>☒</td>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?</td>
<td>☒</td>
<td></td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a-b) New or expanded parks and recreation facilities are not directly included as components of the Recycled Water Master Plan or Ordinance, however recharge facilities could be open to public and provide recreational benefits. Primarily, implementation of the proposed project is intended to provide recycled water for landscape irrigation of parks and other open space areas, which could affect recreation facilities and users: water quality issues will be addressed in the section on hydrology and water quality. Also, implementation of the proposed project could affect recreational facility use if it removes an obstacle to growth. The removal of obstacles to growth can occur when infrastructure is enhanced or expanded in excess of what is needed for the current population or for growth that is planned in a local planning document (such as a general plan). Growth in excess of what is identified in local planning documents could result in unplanned need for additional recreational facilities or additional use of existing facilities that could cause deterioration of the facilities. The EIR will provide an evaluation of the growth-inducement potential of the proposed project as compared to the planned growth in the study area and will address any potential growth-related impacts relating to recreational facilities.
Transportation and Traffic

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. TRANSPORTATION AND TRAFFIC—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>e) Result in inadequate emergency access?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>f) Result in inadequate parking capacity?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., conflict with policies promoting bus turnouts, bicycle racks, etc.)?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a-g) Future implementation of the Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. Both major and minor recycled water pipelines would be located in streets and public rights of way. Other facilities such as new SRWFs would primarily be located within the urbanized Fresno city limits however some elements (including future recharge basins and upgrades to the RWRF) would be located in rural and agricultural areas. Future construction could interfere with traffic movement and level of service (LOS), transit and alternative transportation routes, temporary incompatible land uses, availability of parking, emergency access, and airport/airstrip operations. Construction-related traffic impacts are potentially significant and will be addressed in the EIR.

Operation of the proposed project could affect traffic volumes if the project removes obstacles to growth. The removal of obstacles to growth can occur when infrastructure is enhanced or expanded in excess of what is needed for the current population or for growth that is planned in a local planning document (such as a general plan). Growth in excess of what is identified in local planning documents could result in unplanned increases in traffic, additional use of existing transit or require additional transit be provided. The EIR will provide an evaluation of the growth-inducement potential of the project and will include any potential impacts the Master Plan and Ordinance could have upon traffic and transportation.
## Utilities and Service Systems

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. UTILITIES AND SERVICE SYSTEMS—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Require new or expanded water supply resources or entitlements?</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Comply with federal, state, and local statutes and regulations related to solid waste?</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Discussion

**a, b, e)** Future implementation of the Recycled Water Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. These facilities would primarily be located within the urbanized Fresno city limits however some facilities such as recharge basins could be located in and near rural and agricultural areas such as those near the RWRF. Because recycled water-related facilities form the major element of the project, each technical section and related impact discussion of the EIR will evaluate potential impacts associated with expansion and new treatment facilities, pipelines and facility locations. Recycled water requirements of the Central Valley Regional Water Quality Control Board and California Department of Public Health will be followed. Potential impacts related to surface and groundwater supplies will be addressed in an EIR section discussion of hydrology and water quality. Potential impacts associated with drainage facilities will be addressed in an EIR section for local hydrology, drainage, and groundwater. For these reasons, no further discussion about the need for additional wastewater treatment facilities or infrastructure, or their associated impacts, will be included in the section of the EIR concerning Utility and Service Systems.

**c-g)** New or expanded drinking water treatment, stormwater and solid waste facilities are not included as elements of the proposed project. However, implementation of the Master
Plan and Ordinance could affect water, stormwater and solid waste facility use if they remove obstacles to growth. The removal of obstacles to growth can occur when infrastructure is enhanced or expanded in excess of what is needed for the current population or for growth that is planned in a local planning document (such as a general plan). A complete evaluation of the growth-inducement potential of the Master Plan and Ordinance will be evaluated in the EIR and will address any potential impacts the proposed project could have upon water, stormwater and solid waste facilities.
3. Environmental Effects

Energy and Climate Change

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. ENERGY AND CLIMATE CHANGE—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Result in a substantial increase in overall per capita energy consumption?</td>
<td>☒</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Result in wasteful or unnecessary consumption of energy?</td>
<td>☒</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?</td>
<td>☒</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
<td>☒</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

a-b) Construction of the proposed project would result in an increase in square feet of recycled water utilities and related facilities. Increased energy usage would result from both stationary sources (energy for pumping recycled water, operating recycled water facilities and site operations) and mobile sources (vehicle fuel consumption). This could result in an increase of per capita energy use. It is not anticipated that this increase in energy consumption would be wasteful or unnecessary, however an analysis of expected energy use will be addressed in the EIR. The indirect effects of energy consumption, including air quality emissions will also be examined separately in the EIR (see Air Quality Impact 3, above).

c-d) The proposed project includes future construction of new and expanded buildings, pipelines and facilities, which could contribute to additional mobile sources of greenhouse gases during construction and additional stationary sources of greenhouse gas emissions during operation. Additionally, a potential increase in traffic due to the expanded services could contribute to an increase in mobile sources (vehicles) of greenhouse gas emissions during operation of the project. Greenhouse gas emissions are considered potentially significant and will be addressed in the EIR.
Mandatory Findings of Significance

<table>
<thead>
<tr>
<th>Issues (and Supporting Information Sources):</th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant Impact with Mitigation Incorporation</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. MANDATORY FINDINGS OF SIGNIFICANCE—Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>b) Have impacts that would be individually limited, but cumulatively considerable?  (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?</td>
<td>☒</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Discussion

a) Future implementation of the Recycled Water Master Plan and Ordinance would result in phased development of new and upgraded recycled water facilities, distribution pipelines, pump stations, recharge basins and other facilities. Related construction and operation activities have the potential to impact fish and wildlife, habitat and cultural resources. As discussed above under biological resources (see discussion of impact 4) and cultural resources (see impact 5), these impacts will be addressed in the EIR.

b) Future construction and operation activities associated with the proposed project could result in impacts which are “cumulatively considerable” when added to impacts of other past, present, and reasonably foreseeable future projects. The potential cumulative impacts of the proposed project will be examined in the EIR for each environmental topic.

c) Future construction and operation activities associated with the proposed project have the potential to result in adverse effects to human beings, including impacts related to air emissions, noise, and exposure to hazardous materials. Potential direct and indirect project impacts will be examined in the EIR for each environmental topic.