Notice of Preparation

To: See Attached Mailing List *(Agency)*

(Address)

From: City of Visalia *(Agency)*

7579 Avenue 288 *(Address)*

Visalia, CA 93277

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

City of Visalia will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study ☒ *is* ☐ *is not* attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to James Ross at the address shown above. We will need the name for a contact person in your **agency**.

Project Title: City of Visalia Water Conservation Plant Upgrades Project

Project Applicant, if any: City of Visalia

Date: August 18, 2010

Signature: James K Ross

Title: City of Visalia Wastewater Treatment Plant Manager

Telephone: 559-713-4466

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

SAN JOAQUIN VALLEY
AIR POLLUTION
CONTROL DISTRICT
CENTER REGION
1990 E. GETTYSBURG AVENUE
FRESNO, CA 93726-0244

WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
DISTRICT 5
1685 E STREET
FRESNO CA 93706 2020

DEPARTMENT OF ALCOHOLIC
BEVERAGE CONTROL
3640 E. ASHLAND AVENUE
FRESNO, CA 93726

STATE OF CALIFORNIA
DEPT. OF FISH & GAME REGION 4
1234 E. SHAW AVENUE
FRESNO, CA 93710

U S FISH & WILDLIFE SERVICES
SACRAMENTO WILDLIFE OFFICE
2800 COTTAGE WAY, W-2605
SACRAMENTO, CA 95825

DEPARTMENT OF THE ARMY
U S ARMY ENGINEER DISTRICT,
SACRAMENTO CORPS OF ENGINEERS
1325 "J" STREET
SACRAMENTO, CA 95814-2922

EVANS DITCH COMPANY
PO BOX 1920
TULARE, CA 93275-1920

WATSON/PERSIAN DITCH CO.
P. O. BOX 366
FARMERSVILLE, CA 93223

MODOC DITCH COMPANY
11878 AVENUE 328
VISALIA, CA 93291

TULARE IRRIGATION DISTRICT
PO BOX 1920
TULARE, CA 93275-1920

VISALIA UNIFIED SCHOOL DISTRICT
5000 WEST CYPRESS STREET
VISALIA CA 93277

CALIFORNIA WATER SERVICE CO.
216 NORTH VALLEY OAKS DRIVE
VISALIA, CA 93291-6717

SOUTHERN CALIFORNIA EDISON
ATTN NEW BUSINESS
2425 SOUTH BLACKSTONE
TULARE CA 93274

SOUTHERN CAL GAS COMPANY
TRANSMISSION PLANNING DEPT.
ATTN: PIPELINE PLANNING ASST.
404 N. TIPTON
VISALIA, CA 93291

SBC PLANNING
5555 E. OLIVE AVENUE
FRESNO, CA 93727

TULARE COUNTY
AGRICULTURAL COMMISSION
2800 W. BURREL AVENUE
VISALIA, CA 93291

GOSHEN COMMUNITY
SERVICES DISTRICT
PO BOX 2
GOSHEN, CA 93227

TULARE COUNTY
ENVIRONMENTAL HEALTH SERVICES
5957 SOUTH MOONEY BLVD
VISALIA CA 93277

KAWEAH DELTA
WATER CONSERVATION DISTRICT
2975 N. FARMERSVILLE BLVD.
FARMERSVILLE, CA 93223

SAN JOAQUIN RAILROAD
PO BOX 937
EXETER, CALIFORNIA 93221

(ALUC)
RESOURCE MANAGEMENT GROUP
2530 S. MOONEY BOULEVARD
VISALIA, CA 93277

CALIFORNIA DEPT. OF
CONSERVATION
DIVISION OF RECYCLING
801 K. STREET, MS 18-58
SACRAMENTO, CA 95214

AIRPORT LAND USE COMMISSION
5961 S. MOONEY BOULEVARD
VISALIA, CA 93277

VISALIA MUNICIPAL AIRPORT
9501 W. AIRPORT DRIVE
VISALIA, CA 93277

TULARE COUNTY HOUSING
AUTHORITY
5140 W CYPRESS AVE
VISALIA, CA 93279

V I A H
1138 S. CRENSHAW
VISALIA, CA 93277

TULARE COUNTY
OFFICE OF EDUCATION
2637 WEST BURREL
VISALIA, CA 93278

SDSS
COMMUNITY CARE LICENSING
744 P STREET, MS 19-47
SACRAMENTO CA 95814

CENTRAL CALIFORNIA HCC
ATTN: LUPITA LOMELI
2331 FRESNO STREET
FRESNO, CA 93721

DISTRICT ARCHAEOLOGIST
BUREAU OF LAND MANAGEMENT
3801 PEGASUS DRIVE
BAKERSFIELD, CA 93308

KAWEAH DELTA HEALTH CARE DIST
400 W. MINERAL KING AVENUE
VISALIA, CA 93291

CALTRANS DISTRICT 6
1352 W. OLIVE AVENUE
FRESNO, CA 93728

TULARE COUNTY
AGRICULTURAL COMMISSIONER
4437 S. LASPINA
TULARE, CA 93274

NATIVE AMERICAN HERITAGE COM.
STATE OF CALIFORNIA
915 CAPITAL MALL, ROOM 364
SACRAMENTO, CA 95814

TCRMA
TRANSPORTATION/UTILITIES DIV.
5961 S. MOONEY BLVD.
VISALIA, CA 93277

VISALIA RESCUE MISSION
322 NE 1ST STREET
VISALIA, CA 93291

TCRMA
DEVELOPMENT SERVICES
PROJECT REVIEW DIVISION
5961 S. MOONEY BLVD.
VISALIA, CA 93277

TCRMA
COMMUNITY DEVELOPMENT
REDEVELOPMENT DIVISION
5961 S. MOONEY BLVD.
VISALIA, CA 93277

VISALIA CHAMBER OF COMMERCE
220 N. SANTA FE STREET
VISALIA, CA 93291

TCRMA
PERMITS/SUBDIVISION DIVISION
5961 S. MOONEY BLVD.
VISALIA, CA 93277

DOWNTOWN VISALIANS
104 S. CHURCH
VISALIA, CA 93291

TCRMA
CURRENT PLANNING
5961 S. MOONEY BLVD.
VISALIA, CA 93277

CITY OF VISALIA
CORPORATION YARD
336 N. BEN MADDOX WAY
VISALIA, CA 93292

TULARE COUNTY CLERK
COUNTY CIVIC CENTER
221 SOUTH MOONEY BOULEVARD
VISALIA, CALIFORNIA 93291

TC SHERIFF DEPARTMENT
ATTN: TOM SIGLEY
2404 W. BURRELL
VISALIA, CA 93291

CITY OF VISALIA
FIRE DEPARTMENT
707 W ACEQUIA
VISALIA, CA 93291

CITY OF VISALIA
POLICE DEPARTMENT
303 S. JOHNSON
VISALIA, CA 93291

TULARE COUNTY FARM BUREAU
PO BOX 748
VISALIA, CA 93279

KAWEAH MANAGEMENT CO.
ATTN: KEN KUGLER
PO BOX 791
VISALIA, CA 93279

OFFICE OF PLANNING & RESEARCH
STATE CLEARING HOUSE
PO BOX 3044
SACRAMENTO, CA 95812-3044

HABITAT FOR HUMANITY
715 S. BRIDGE
VISALIA, CA 93277

CITY OF VISALIA
WATER CONSERVATION PLANT
UPGRADES PROJECT
INITIAL STUDY

PREPARED FOR:

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

PREPARED BY:

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

August 2010

ICF
INTERNATIONAL

ICF International. 2010. City of Visalia Water Conservation Plant Upgrades Project Initial Study. Final. August. (ICF 00663.09.) Bakersfield, CA. Prepared for City of Visalia, Visalia, CA.

Contents

Table

Figures

Acronyms and Abbreviations

A [Zone]	Agriculture (City of Visalia)
AB	Assembly Bill
AE-40 [Zone]	Exclusive Agricultural—40 Acre Minimum (County of Tulare)
AP [Zone]	Airport (City of Visalia)
basin (or SJVAB)	San Joaquin Valley Air Basin
BOD	biochemical oxygen demand
Btu	British thermal unit
CEQA	California Environmental Quality Act
CFM	cubic feet per minute
CFR	Code of Federal Regulations
City	City of Visalia
CO	carbon monoxide
County	County of Tulare
CUP	conditional use permit
CVRWQCB	Central Valley Regional Water Quality Control Board
EIR	Environmental Impact Report
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
GHGs	greenhouse gases
gpm	gallons per minute
HP	horsepower
hr	hour
KVA	kilovolt amperes
lb	pound
MBR	membrane biological reactor
MBTA	Migratory Bird Treaty Act
mg/L	milligrams per liter
mgd	million gallons per day
MSDS	material safety data sheet(s)
NO_x	nitrous oxides
NPDES	National Pollution Discharge Elimination System
NWI	National Wetland Inventory
PM10	particulate matter smaller than or equal to 10 microns in diameter
PM2.5	particulate matter smaller than or equal to 2.5 microns in diameter
project	City of Visalia Water Conservation Plant Upgrades Project
psi	pounds per square inch
QP [Zone]	Quasi-Public (City of Visalia)
ROGs	reactive organic gases
SCADA	Supervisory Control and Data Acquisition
SJVAB (or basin)	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District

SR	State Route
state	State of California
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDH	total dynamic head
TID	Tulare Irrigation District
UV	ultraviolet
WCP	water conservation plant
WDR	Waste Discharge Requirements

Environmental Checklist

1.	**Project Title:**	City of Visalia Water Conservation Plant Upgrades Project (project)
2.	**Lead Agency Name and Address:**	City of Visalia 7579 Avenue 288 Visalia, CA 93277
3.	**Contact Person and Phone Number:**	James Ross 559-713-4466
4.	**Project Location:**	The existing wastewater treatment plant is located in the southeast corner of the intersection of Road 68 and Avenue 288 in Visalia, California. All proposed upgrades to the plant would occur within its existing fence line. The proposed recycled water conveyance system would extend away from the treatment plant to the west and east. The western alignment of the conveyance system would follow the southern fence line of the plant to the west, head south, and then west to Road 68. The conveyance system would then follow Road 68 and split just southwest of the treatment plant. One arm of the conveyance system would continue west adjacent to Mill Creek. Also, there would be an inlet into the existing City of Visalia (City) Basin No. 4's ditch. Basin No. 4 is an existing basin used for groundwater recharge and stormwater capture activities. The recycled water would then be conveyed in the existing ditch to Basin No. 4 further to the west. The other western arm would continue south along Road 68 to the existing Tulare Irrigation District Basin No. 3's ditch. Basin No. 3 is also an existing basin used for groundwater recharge and stormwater capture activities. In the existing ditch, the recycled water would then be conveyed to Basin No. 3 farther to the west. The eastern alignment of the conveyance system would extend away from the southern fence line of the plant, continue east, go under State Route (SR) 99, and traverse the southern boundary of the Visalia Municipal Airport (along the Persian Ditch alignment). At the southeastern corner of the airport, the conveyance system would split, with one arm going to the north along Plaza Drive and terminating near to and south of the intersection of State Route 198 and Plaza Drive, at Plaza Park. Another arm going north would follow a two-lane road along the eastern perimeter of the Valley Oaks Golf Course and terminate near the clubhouse. The third arm would continue along Walnut Avenue and terminate about 0.4 mile to the east of the split. Existing irrigation water delivery to 250 acres of farmland south of the plant would continue using a proposed high-pressure line connected to an existing

		18-inch-diameter pipeline presently being used for delivery of secondary treated effluent. The proposed high-pressure line would be tied into this existing pipeline either within the plant's fence line or just south of the fence line within an existing walnut grove. Please refer to Figure 1 for project vicinity, Figure 2 for project footprint, and Figure 6 for the proposed offsite recycled water conveyance system.
5.	**Project Sponsor's Name and Address:**	Please refer to Item 2, Lead Agency Name and Address, above.
6.	**General Plan Designation:**	Agriculture, Public Institutional, Park, and Conservation (City general plan); Rural Valley Lands Plan (County of Tulare [County] general plan) (City of Visalia 1991; County of Tulare 2001)
7.	**Zoning:**	Agriculture (A), Quasi-Public (QP), and Airport (AP) (City zoning); Exclusive Agricultural–40-Acre Minimum (AE-40) (County zoning)

8. **Description of Project:**

Introduction

The City of Visalia Water Conservation Plant Upgrades Project (project) would:

1. improve wastewater treatment facilities at the City's existing water conservation plant (WCP),
2. develop the initial recycled water conveyance system for disposal and reuse of treated effluent (to California Administrative Code Title 22 standards) generated by the plant, and
3. provide effluent treated to Title 22 standards for a possible water exchange of the treated effluent for surface water between the City and the Tulare Irrigation District (TID) and/or other public or private entity or entities.

The treatment plant improvements or upgrades, including two regulating basins, would occur within the existing footprint of the plant, on site. The initial recycled water conveyance system—consisting of new underground pipelines and existing ditches—would be developed outside of the WCP's footprint, off site. A proposed high-pressure line to be tied into an existing 18-inch pipeline presently used for delivery of secondary treated effluent to 250 acres of farmland south of the plant would be tied into this existing pipeline either within the plant's fence line or just south of the fence line within an existing walnut grove. As recommended by the City's 2008 water conservation plant master plan (Carollo Engineers 2008), while the upgrade would improve the plant facilities, the design capacity would remain at its currently rated level of 22 million gallons per day (mgd). However, all proposed facilities would be designed with provisions for future expansion of plant capacity to 26 mgd. Additional improvements to the WCP beyond the proposed onsite facilities analyzed in this document would be necessary to ultimately increase design capacity at the plant to 26 mgd. These additional improvements would be required to undergo their own separate environmental clearance process in the future.

The following project description is based on the *City of Visalia Preliminary Design Report for Water Conservation Plant Upgrades* (Parsons Water & Infrastructure 2010) and *Preliminary Design Concepts and Approach for Completion of Offsite Pipeline Design for the Water Conservation Plant Upgrade Project* (Provost & Pritchard Consulting Group 2010).

Background

Currently, the treated effluent from the plant is discharged to nearby Mill Creek (a water of the United States) under Waste Discharge Requirements (WDR) Order No. R5-2006-0091 issued by the Central Valley Regional Water Quality Control Board (CVRWQCB). Among other requirements, this

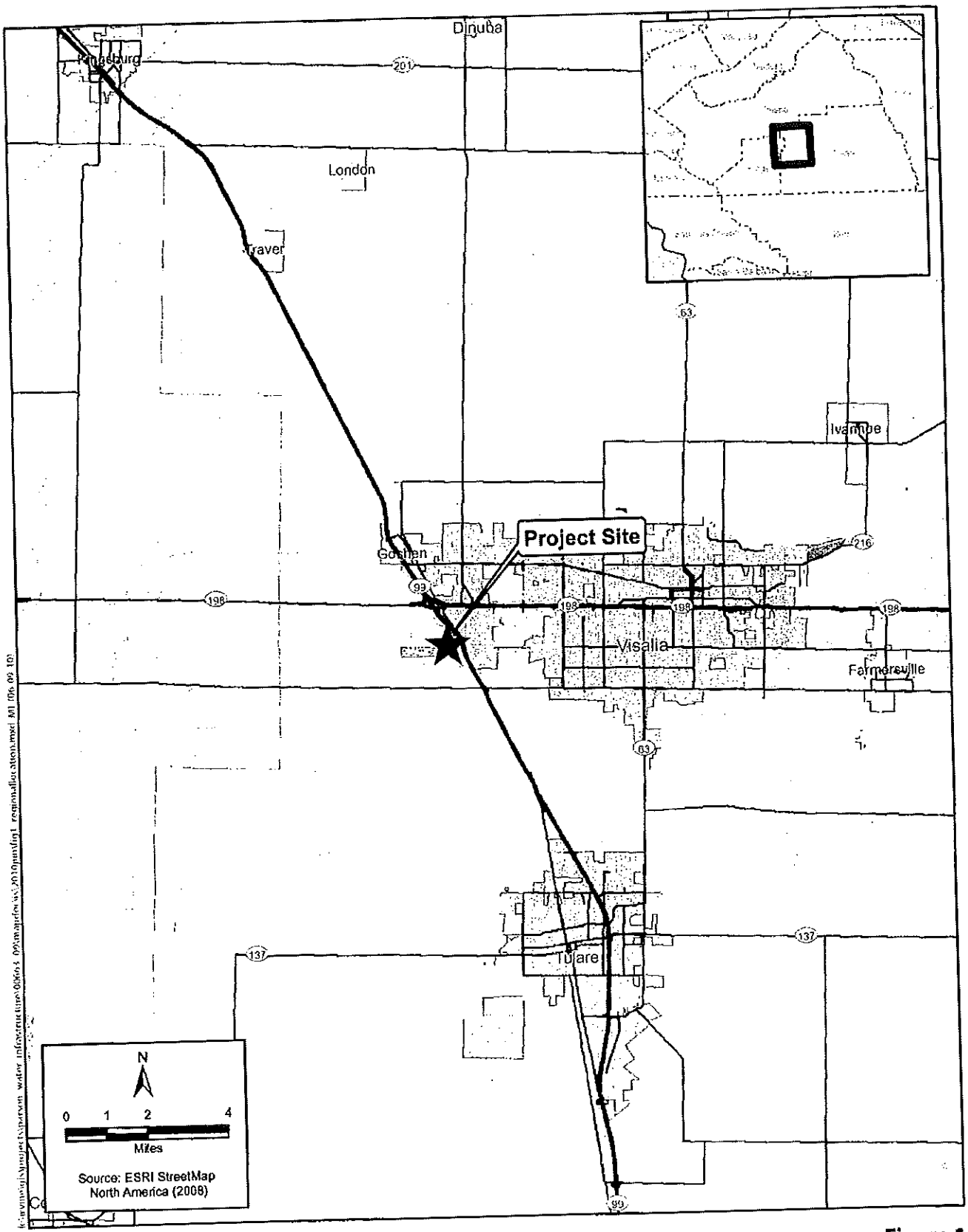
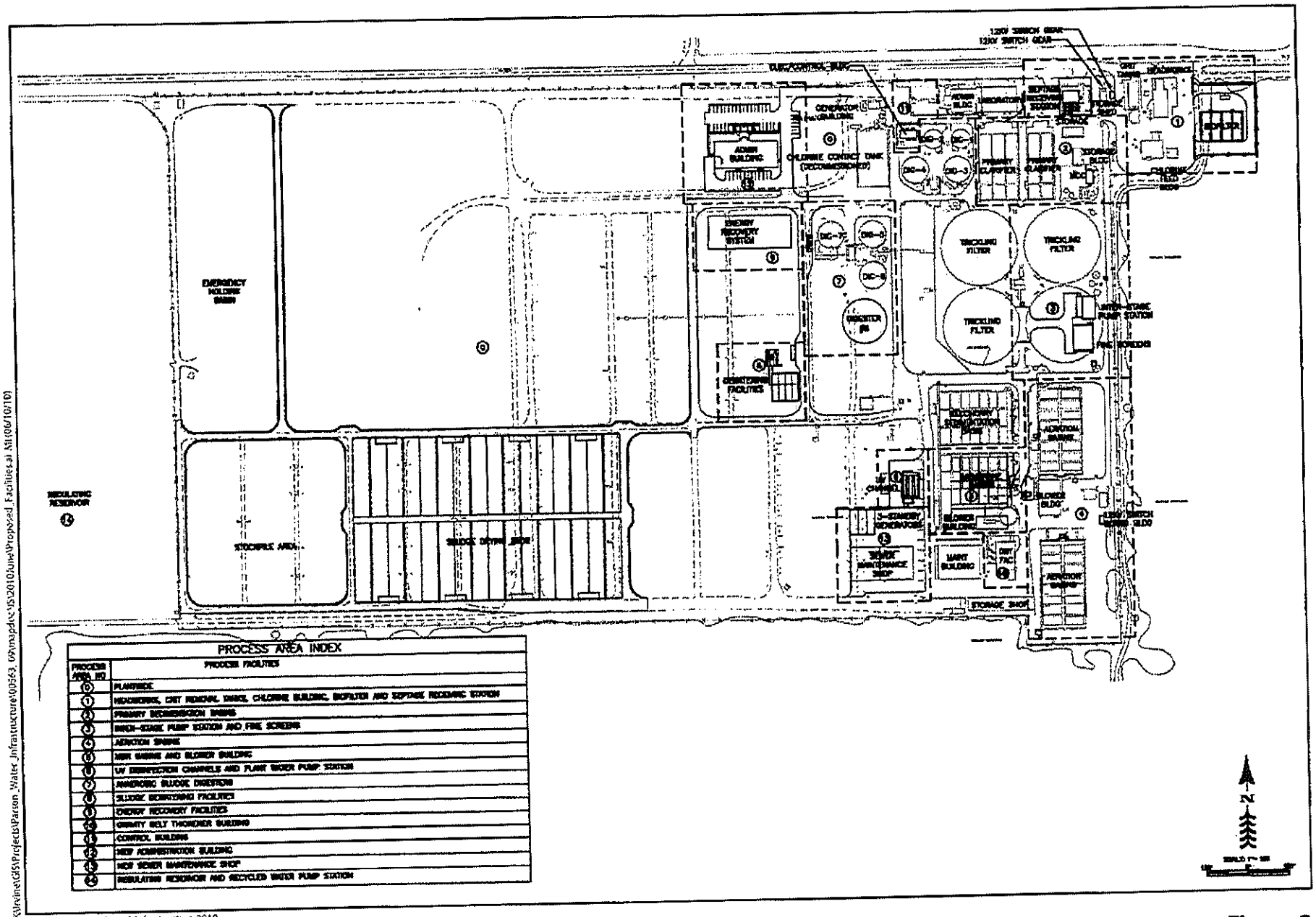


Figure 1
Regional Location



Source: Parsons Water & Infrastructure 2010.

Figure 2

Proposed Facilities Within the Plant Fence Line

ICF INTERNATIONAL

order limits the plant discharge to an average flow of 20 mgd, which is 2 mgd below the rated capacity of the existing treatment plant. The order further requires that the ammonia concentration in the discharge be reduced to 0.025 milligram per liter (mg/L) by March 25, 2011. To address these limitations, which are expected to become even more stringent in the future, the City has already planned to discontinue the discharge to Mill Creek and divert the plant discharge to Basin No. 4, which is an existing percolation basin to the southwest of the plant. In addition, while there is no limitation at this time for the nitrogen concentration in the plant discharge for disposal by percolation, it is expected that such limitation would be imposed on the City in the near future. Therefore, the upgrade of the plant's wastewater treatment processes would also include denitrification of the plant effluent.

In recent years, the water demand of the City has rapidly increased and resulted in significant overdraft of the City's groundwater table. Therefore, recycling and reuse of the WCP effluent is a part of the City's plan to reduce its demand for potable water. Therefore, it is the objective of this project to upgrade the WCP to produce recycled water suitable for the identified reuses in conformance with California Administrative Code Title 22 with a plant capacity of 22 mgd.

Existing Plant Facilities

The existing plant provides the influent wastewater with preliminary, primary, and secondary treatment. The plant effluent is disinfected by means of chlorination and dechlorination prior to discharge to Mill Creek. The solids generated by the wastewater treatment facilities are processed by anaerobic sludge digesters and sludge drying beds. The dried sludge from the beds is stockpiled on site for about 1 year before it is removed from the plant.

To establish the basis for determining the need for improvements, the adequacy of the various wastewater treatment and solids processing facilities were analyzed with respect to the design criteria set forth above. The results of this analysis are summarized as follows:

- Preliminary Treatment – The headworks and the grit removal facilities are adequate to accommodate the design average and peak flows. However, the addition of one pump is recommended to augment the firm capacity of the influent pump station (capacity of the pumping system with one of the larger units out of service) to handle the peak flow.
- Primary Treatment – The five primary sedimentation basins have adequate capacity to treat the design flows.
- Secondary Treatment – While the trickling filters have adequate capacity to accommodate the design flows, the activated sludge facilities are not capable of denitrification. In addition, the secondary sedimentation basins would not have sufficient capacity to remove the suspended solids to be generated by the upgraded secondary treatment process.
- Disinfection – The existing chlorine gas system has ample capacity to handle the needs for disinfecting the upgraded plant effluent. However, the chlorine contact tanks are too small for production of recycled water.
- Sludge Processing – The capacity of the gravity belt thickeners is adequate for thickening of the secondary sludge from the upgraded wastewater treatment process. The anaerobic digesters do not have the capacity required to process the solids expected from the upgraded treatment facilities.
- Discharge Facilities – The treated effluent is currently discharged to Mill Creek that runs along the northern and western perimeter of the plant via a discharge pipeline from the plant to the creek. The discharge pipeline connection to the creek is located near the northwestern corner of the plant. To address water quality limitations and in anticipation of future National Pollution Discharge Elimination System (NPDES) requirements, the City plans to discontinue discharge into Mill Creek and instead would treat effluent to Title 22 standards and discharge into a proposed recycled water conveyance system, which is part of this project.

Proposed WCP Upgrades

Figure 1 shows the project's general vicinity and location. Figure 2 presents both the existing treatment plant site and the arrangement of the existing and proposed plant facilities to accomplish the plant upgrade.

The site plan in Figure 2 presents the following features:

- Consolidation of Process Facilities – All facilities related to a unit process are grouped together in the same area to enhance the ease of operation and maintenance for that process. Accordingly, proposed membrane biological reactor (MBR) basins are located in the same area as the aeration basins and the recycled water pump station; the proposed digester is in the same area as the existing digesters; and the sludge stockpile area is located adjacent to the proposed sludge drying beds. Although the sludge dewatering facilities are separated from the digesters, they are nonetheless within a short distance from the digesters.
- Proposed Administration Building and Energy Recovery Facilities – The proposed administration building would be located at an area upwind of and away from the plant's process facilities to minimize the impacts of wastewater odor, noise from equipment operation, and noise and dust from the truck traffic through the plant. As dust from the digested sludge drying beds can adversely impact the performance of the energy recovery system, a buffer area is reserved between the facilities areas. As noted in Figure 2, this buffer area may be used for recycled water demonstration landscaping in the future.
- Traffic through the Plant – With the proposed administration building to be located adjacent to Avenue 288 and away from the plant's process areas, visitors can access this building without interference by the vehicle traffic through the process areas. Ample parking would be provided here for plant personnel and visitors, and a new plant entrance dedicated to this building would also be provided.

  The existing driveway system in the plant would be upgraded to enhance vehicular access to the various plant facilities. The pattern of the upgraded driveways would be designed for logical traffic circulation and ease of delivery trucks to enter and leave the treatment plant.

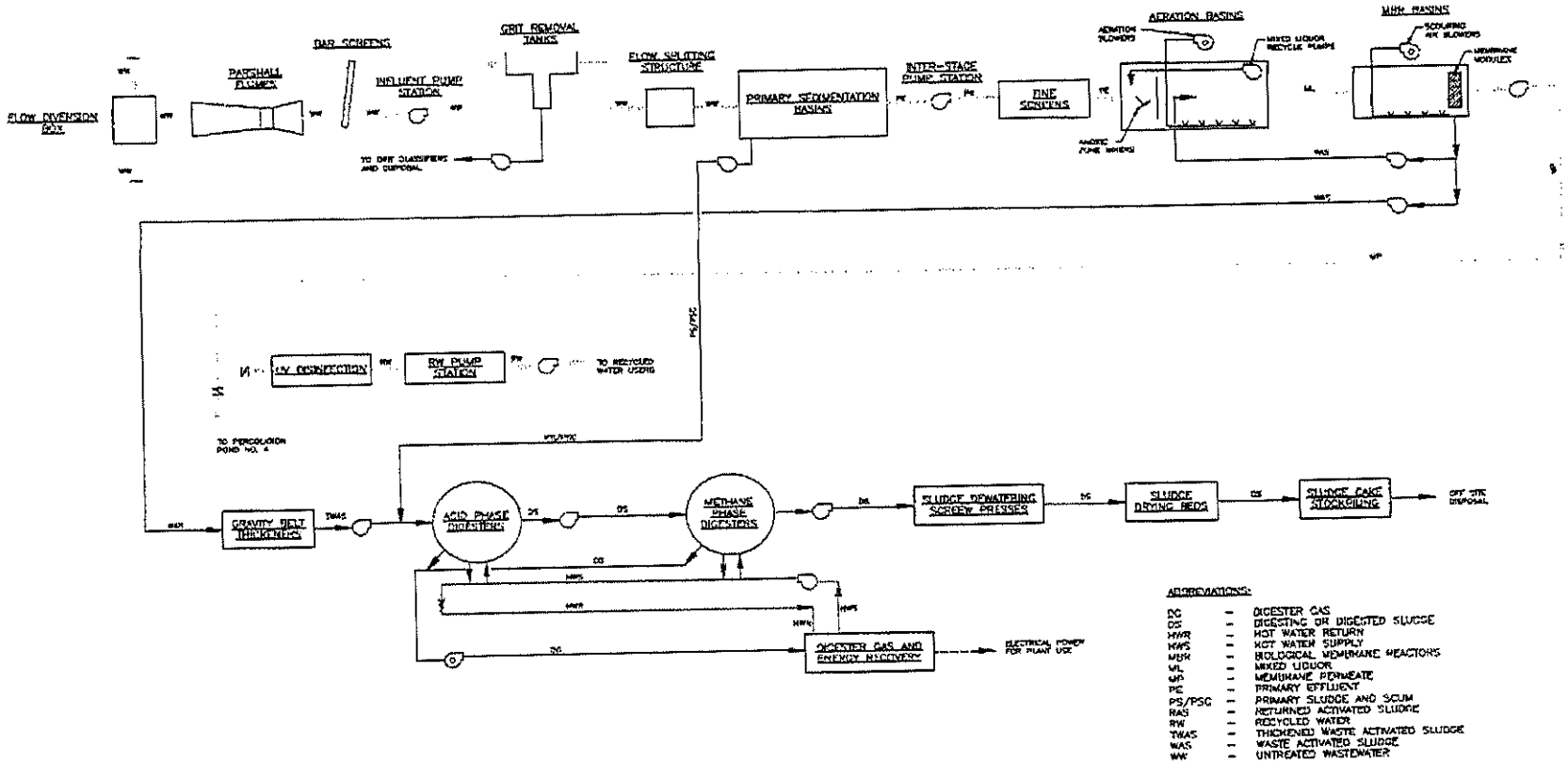
  The transportation of dried sludge to the stockpile area or out of the treatment area, in particular, can be dusty and noisy. For this reason, the proposed sludge drying beds and the stockpile area are located at the far end of the treatment plant site, and a new plant entrance and driveway would be constructed specifically for sludge transportation.

Preliminary Design of Proposed WCP Upgrades

With the design criteria and the analysis of existing plant facilities as the basis, alternatives for upgrading the plant's various wastewater and solids treatment processes were developed and evaluated. The results of these evaluations were then compiled into a preliminary design of the WCP upgrade. The design concepts are graphically illustrated in the following figures:

- Figure 3, Proposed Process Flow Diagram – This figure presents the wastewater treatment process flow through the upgraded treatment plant. Essentially, the WCP would be converted from a wastewater treatment plant to a water reclamation plant.
- Figure 4, Hydraulic Profile – This figure presents the hydraulic profile through the upgraded treatment facilities and illustrates the estimated hydraulic gradients required to accommodate the peaks flows for this current plant upgrade and the future plant expansion.
- Figure 5, Flow and Solids Balance Diagram – This figure presents the liquid flow streams and solids quantities that the various facilities of the upgraded treatment plant are required to accommodate. The data presented in this figure are the basis for determining the capacities and physical sizes of the various treatment units.

To convert the existing wastewater treatment plant to a water reclamation plant and to upgrade



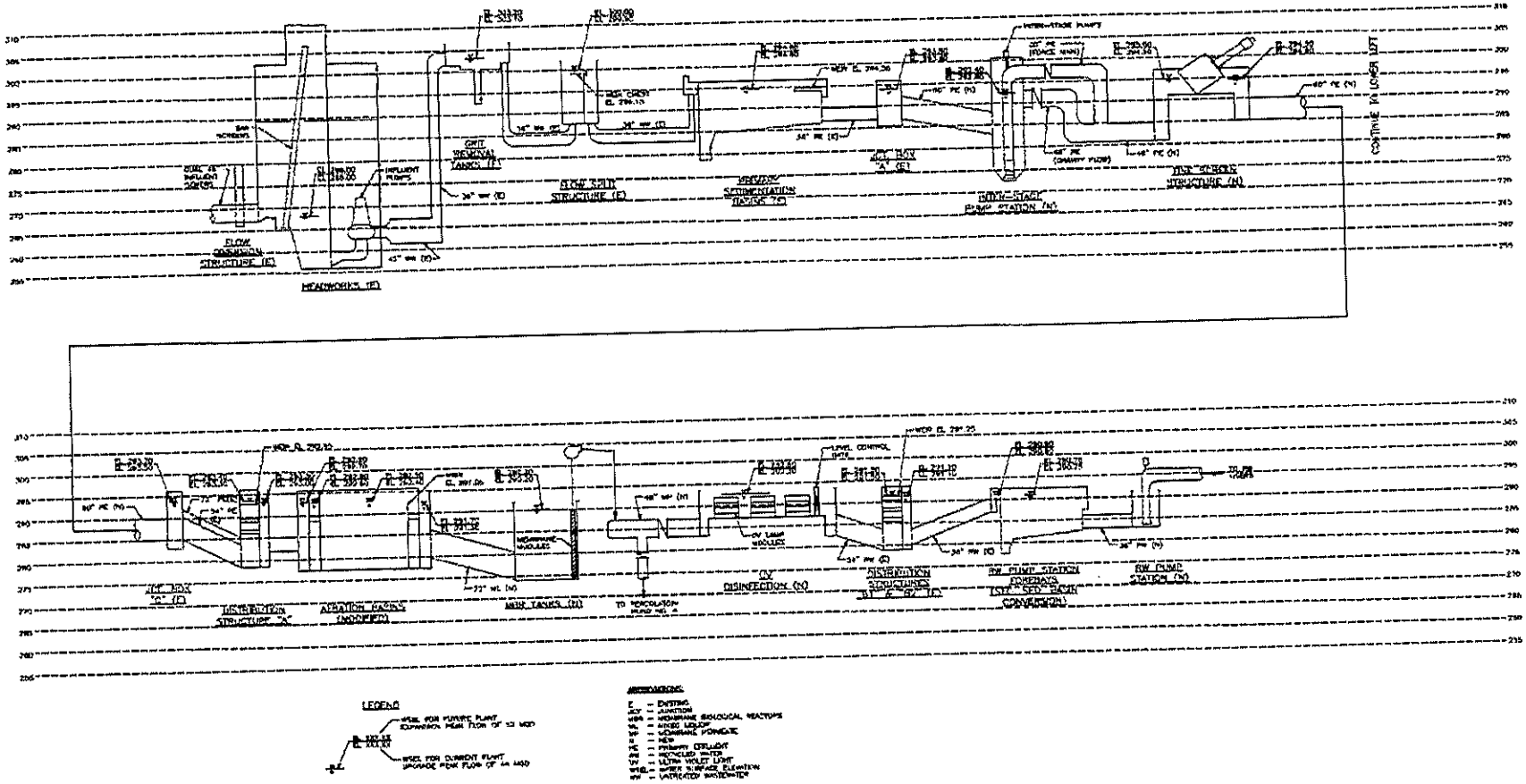
K:\Irvine\GIS\Projects\Parson_Water_Infrastructure\100653_09\mxd\doc\15\2010JuneFigure_3.ai (05/18/10)

Source: Parsons Water & Infrastructure 2010.

Figure 3

Proposed Process Flow Diagram

ICF INTERNATIONAL

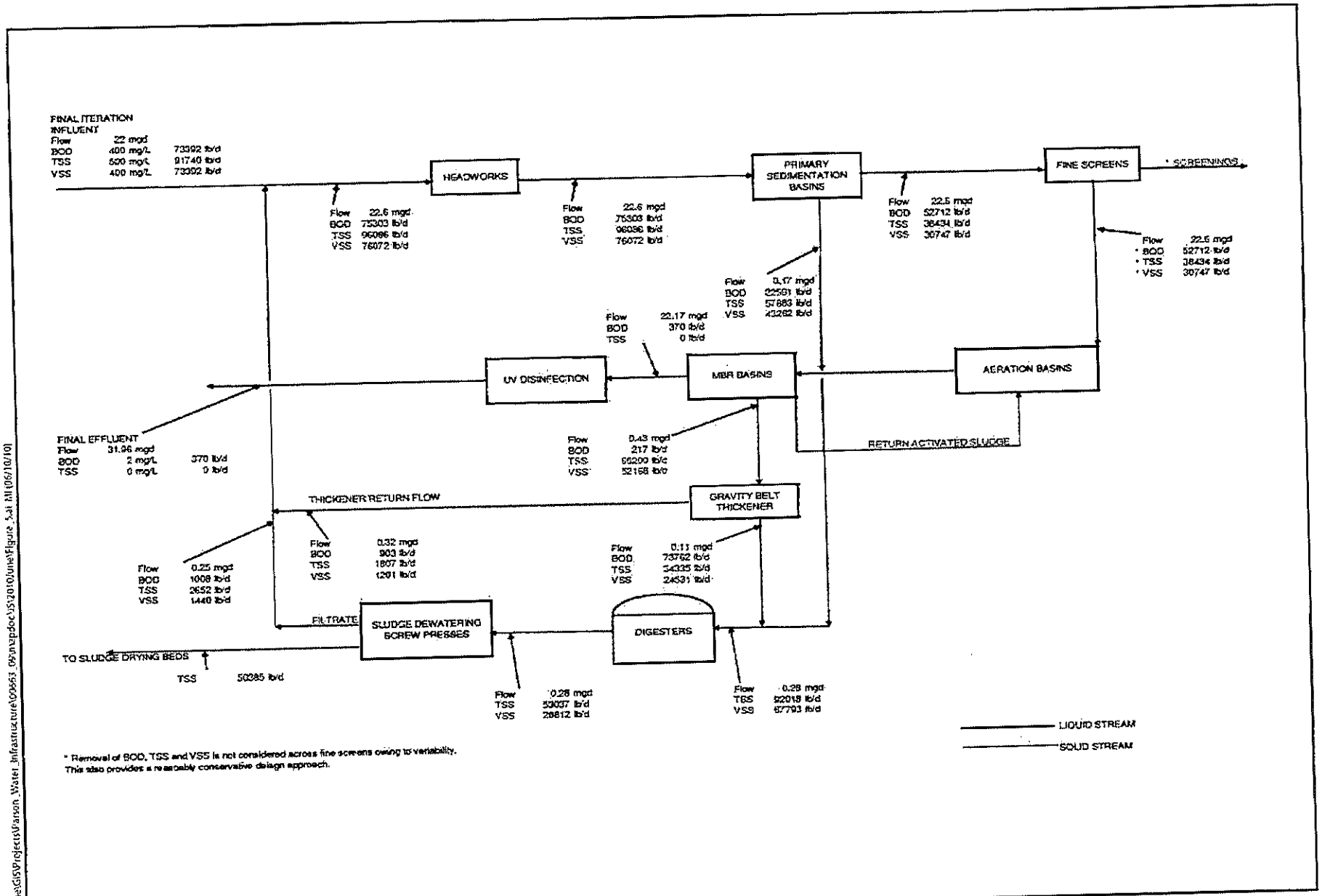


Source: Parsons Water & Infrastructure 2010.

K:\Inet\GIS\Projects\Parson_Water_Infrastructure\006663_09\mxd\doc\15\2010\ume\Figure_4.ai MH(05/10/10)

Figure 4
Hydraulic Profile

ICF INTERNATIONAL



K:\Projects\SVProjects\Parson_Water_Infrastructure\009663_09\mxd\doc\VS\2010\June\Figure_5.ai (06/10/10)

Source: Parsons Water & Infrastructure 2010.

Figure 5

Flow and Solids Balance Diagram

ICF INTERNATIONAL

the plant's solids processing facilities as shown in Figures 3 through 5, certain existing facilities would be reused or modified and a number of new facilities would be constructed. A summary description of the unit processes to be provided at the upgraded WCP is presented in the following paragraphs, and a listing of the major new equipment associated with the unit processes is provided in Table 1, which follows the summary description.

Headworks

While the existing process flow through the headworks would be maintained as shown in Figure 2, a new influent pump and an odor-control system would be added to this installation. The addition of the new influent pump would provide the influent pump station with a firm capacity matching the projected peak flow of 44 mgd. The construction of the odor-control system includes the reconstruction of the ventilation system in the wastewater receiving section of the headworks and an odor removal biofilter to treat the foul air withdrawn from this area.

Grit Removal and Primary Treatment

Both the existing grit removal facilities and the primary sedimentation basins would be retained in service with no modifications. However, the four existing centrifugal pumps being used to pump the primary sludge to the digesters would be replaced with progressive cavity pumps.

Interstage Pump Station

Due to the severely limited hydraulic gradient between the existing primary sedimentation basins and the aeration basins' flow distribution structure, an interstage pump station would be constructed to lift the primary effluent to the upgraded secondary treatment facilities. This pump station would have a self-cleaning type of wet well and would be equipped with three variable-speed vertical propeller pumps with a firm capacity of 44 mgd.

Water Reclamation Processes

The existing secondary treatment process would be converted to an MBR process. This MBR process is one that includes an activated sludge process for biochemical oxygen demand (BOD) and nitrogen removal and filtration by means of membranes with micro-size pores for suspended-solids removal without the need for secondary clarifiers. The process is designed to produce the recycled water required to meet the water reuse objective of this project, i.e., to meet Title 22 standards.

As the filtration membrane of this process is sensitive to the stringy materials and coarse inorganic solids that may be present in the primary effluent, the discharge of the interstage pump station would be drained through a set of fine screens prior to delivery to the MBR facilities.

The existing aeration basins would be retained in service after modifications for BOD and nitrogen removal. A battery of new MBR tanks would be constructed to receive the mixed liquor from the aeration basins and to house the membrane modules. The mixed liquor is further aerated in the MBR tanks for completion of BOD removal. The liquid is then pumped out of the mixed liquor through the membrane modules as a denitrified and clear membrane permeate ready for disinfection.

The structure of the MBR tanks would be constructed to accommodate the number of membrane modules required to treat up to 26 mgd. However, it would initially be furnished with the number of membrane modules for 18 mgd only in order to better match the projected plant influent flow and keep the construction cost of this plant upgrade reasonable. The facilities would be so designed such that as the plant flow increases, additional membrane modules and the associated equipment can be readily installed.

The existing aeration blowers would be replaced by new units with the capacities required for BOD and nitrogen removal in the aeration basins. Additional blowers with lesser capacities would be provided at the MBR tanks for completion of BOD removal and scouring of the membrane modules. New sludge pumps would be provided for return of the activated sludge from the MBR tanks to the aeration basins and wasting to the digesters of the excess sludge produced by the MBR process.

Disinfection

For production of recycled water, the membrane permeate would be disinfected with ultraviolet

(UV) light as indicated in Figure 2 to complete the recycled water production. The disinfection facilities would include three parallel channels, each at approximately 3.5 feet wide by 5 feet deep, housing several modules of low-pressure, high-intensity UV lamps and flow-level control gates.

Recycled Water Pump Station

Disinfected recycled water would be piped from the UV disinfection facilities to two onsite regulating basins. As recycled water demand would fluctuate throughout the day, the holding capacity of the regulating basins can provide a certain amount of equalization between the demand and production of recycled water, thus attenuating the recycled water pumping requirement.

MBR Sludge Thickening

The existing gravity belt thickeners would be retained in service for thickening the sludge waste from the MBR process prior to delivery to the plant's sludge digestion facilities. As indicated in Figure 5, this process is expected to thicken the sludge from a solids content of about 1% to 4% prior to delivery to the plant's anaerobic sludge digestion process.

Sludge Digestion

As indicated in Figure 5, the existing anaerobic sludge digestion process will be upgraded to a two-phase digestion system, and a new digester would be added to the system. The two-phase system would separate the acid-forming phase from the methane gas production phase of the sludge digestion process to maximize digester gas production. The new digester would increase the capacity of the system to accommodate the sludge projected for the design plant flow of 22 mgd.

To this end, the digester piping would be modified to feed all of the primary and thickened MBR sludge to the existing Digester No. 3, where the predominant biochemical reactions are hydrolysis of the organic materials and acid formation. The digesting sludge from this acid phase digester is then distributed to the other six existing digesters by a sludge transfer pump station for further digestion and production of digester gas (i.e., methane and carbon dioxide). The digesting sludge from those six digesters is collected to a new digester for completion of the sludge digestion and digester gas production. The new digester would also be sized with extra volume for storage of 2 days' worth of digested sludge in the event that the subsequent sludge dewatering operation should be out of service.

The mixing system of each existing digester would be examined during the detailed design. It is anticipated that the existing nozzles of the jet mix system would need to be relocated and that additional nozzles would be required for thorough mixing of the digester contents.

Sludge Dewatering

Two presses would be provided to dewater the processed sludge from the anaerobic digesters. These presses would be designed to dewater the digested sludge to a solids content of 20% to 22%. The purpose of this dewatering process is to reduce the volume of sludge to be transferred to the sludge drying beds as well as the reconstruction requirements of the existing drying beds.

Sludge Drying Beds

As is currently practiced, sludge drying beds would continue to be used for solar drying of the dewatered digested sludge, and the dried sludge would be subsequently stockpiled in a separate area for removal from the plant site by a third party. However, the CVRWQCB has ordered that the sludge drying beds be lined to prevent seepage of the moisture from the drying sludge to the ground below the beds. Therefore, a portion of the existing drying beds would be reconstructed with an asphaltic concrete pavement to provide an effective bed area of 5 acres. In addition, a 3-acre area would also be paved for stockpiling of the dried sludge to be removed from the drying beds.

Energy Recovery

The digester gas produced by the anaerobic sludge digesters would be used to fuel a new energy recovery system to generate electrical power for plant use and hot water for digester heating. The core element of the energy recovery system would consist of a number of fuel cells or micro-turbine units to be preceded with a digester gas treatment system for removal of hydrogen sulfide and siloxane.

Table 1. Proposed New WCP Upgrades Equipment (On Site Only)

Process Area	Equipment	No. of Units	Equipment Ratings, Each	Remarks
Headworks	Influent Pump	1	7,010 gpm x 40 feet TDH with 125 HP motor	Submersible pump for dry-pit installation with variable frequency drive to be manufactured by KSB, same as existing influent pumps
	Biofilter Fan	2	18,000 CFM x 10 inches with 50 HP motor	Fiberglass centrifugal fans
Primary Sedimentation Basins	Primary Sludge Pumps	4	100 gpm x 40 psi TDH discharge pressure with 30 HP motor	Progressing cavity pumps to replace existing centrifugal pumps
Inter-stage Pump Station	Inter-stage Pumps	3	15,300 gpm x 4 feet TDH with 20 HP motor	Vertical propeller pumps with variable-frequency drives
Fine Screen Structure	Fine Screens	6	9 mgd with 3 HP motor	Circular drum screen with 1 or 2 milliliter perforations
Aeration Basins	Aeration Blowers	6	6,200 CFM x 8.5 psi with 300 HP motor	Single-stage centrifugal blowers
	Mixed Liquor Recycle Pumps	6	15,400 gpm x 13 feet TDH with 75 HP motor	Horizontal centrifugal or vertical mixed-flow pumps
MBR Basins	Air Scour Blowers	5	7,800 CFM with 250 HP motor	Single-stage centrifugal blowers
	Membrane Modules	Number of modules and module capacity to be determined upon selection of membrane modules during detailed design		Flat-sheet or hollow-fiber membranes to be selected during detailed design
	Membrane Permeate Pumps	6	6,200 gpm with 75 HP motor	Centrifugal pumps with variable-frequency drives
	Sludge Recirculation (RAS) Pumps	6	12,400 gpm x 10 feet TDH with 60 HP motor	Horizontal centrifugal or vertical mixed-flow pumps with variable-frequency drives
	Waste Activated Sludge Pumps (WAS) Pumps	3	280 gpm x 30 psi TDH with 15 HP motor	Progressing cavity pumps with variable-frequency drives
UV Disinfection	UV lamp modules	150	300 KVA	Low pressure, high intensity
Existing Digesters	Sludge Transfer Pumps	2	400 gpm x 40 feet TDH with 15 HP motor	Rotary lobe pumps for transfer of digesting sludge from acid-phase digester to methane-phase digesters
New Digester	Digester Mixing Pumps	1	4,500 gpm x 40 feet TDH with 75 HP	Centrifugal chopper pump

Table 1 Continued

Process Area	Equipment	No. of Units	Equipment Ratings, Each	Remarks
			motor	
	Digesting Sludge Heat Exchanger Circulation Pumps	1	300 gpm x 25 feet TDH with 7.5 HP motor	Centrifugal chopper pump
	Hot Water Boiler/Heat Exchanger	1	400,000 Btu/hr	Dual fuel (digester and natural gases) hot water boiler/heat exchanger combination unit for digester heating
	Screw Press Feed Pumps	3	100 gpm x 40 psi with 10 HP motor	Progressing cavity pumps
Sludge Dewatering	Sludge Dewatering Presses	2	1,100 lb/hr of dry solids with 10 HP motor	Screw presses

Source: Parsons Water & Infrastructure 2010.

Acronyms

Btu = British thermal unit
CFM = cubic feet per minute
gpm = gallons per minute
HP = horsepower
hr = hour
KVA = kilovolt amperes
lb = pound
mgd = million gallons per day
psi = pounds per square inch
TDH = total dynamic head

Major New Equipment

Certain new equipment items would be furnished for upgrading the unit processes described above. A listing of the major items of such new equipment is presented in Table 1.

Support Facilities

In addition to the upgrade of the unit processes described above, certain existing support facilities would also be upgraded and new support facilities would be constructed as follows:

- New Administration Building – A new administration building would be constructed. This building would house offices, meeting rooms, restrooms, and the Supervisory Control and Data Acquisition (SCADA) center of the upgraded treatment plant. Ample parking spaces would be provided around the building.
- New Septage Receiving Station – A new septage receiving station would be constructed at the site of the existing collections shop building for disposal of the materials collected by the City's sewer maintenance crew.
- New Collections Shop Building – A new collections shop building would be constructed west of the existing maintenance building at the south end of the plant. This new building would replace the existing building to be demolished in favor of the new septage receiving station described above.
- Primary Sludge Pipeline Replacement – The existing pipeline that conveys the primary sludge from the sedimentation basins to the digesters has experienced corrosion over its long years of service and would be replaced.
- Plant Drain System Flow Meters – Sonic-type flow meters would be installed at the two existing pipelines that return the overflow from the degritting equipment and the supernatant from the gravity belt sludge thickeners to the headworks. A sonic flow meter would also be provided at the 12-inch storm drain that discharges to the headworks.
- Plantwide SCADA System – The existing plantwide SCADA system would be upgraded to a network of fiber optic cables for transmission of the monitoring and control signals between the control center and the various plant processes. A new control building would be constructed to the west of the existing Digester No. 2 to house the new plant control center, and another plant control center would also be provided in the proposed administration building.
- Plantwide Electrical System – The existing plantwide electrical power distribution system would be upgraded to meet the power demand of the upgraded plant. The existing power substations would be modified and a new substation would be constructed to effectively distribute the electrical power supply to the various modified and proposed plant facilities. A new engine generator would be added to the existing standby power generation system to meet the demand of the plant's essential load in the event of a commercial power outage. In addition, the capacity of one of the existing standby engine generators appears to be marginal and the need for replacement would be determined during detail design.

Proposed Offsite Recycled Water Conveyance System

The technical report prepared by Provost & Pritchard Consulting Group (2010) outlines the preliminary design and pipeline alignments for the recycled water conveyance system for disposal and reuse of treated effluent from the WCP. This system includes: (1) Basin No. 4 pipeline, (2) TID pipeline and irrigation pipelines serving City farmland south of the WCP, and 3) irrigation delivery pipelines for areas east of SR-99 including associated farmland, golf course, and parks. The proposed system would deliver tertiary-treated effluent from the WCP to all users and basins. Figure 6 shows the proposed pipeline alignments.

The Basin No. 4 pipeline is designed as a gravity pipeline. The TID pipeline system is also designed as a gravity pipeline and includes two regulating basins constructed at the upstream end within the WCP's fence line. The irrigation pipelines to the east and serving 250 acres of farmland south of the WCP would operate at low water pressure. The easterly pipeline system would be designed so that

it can expand in capacity with increased system pressures with a second future regulating basin east of SR-99.

The WCP's proposed UV disinfection system would be connected to two proposed regulating basins. The regulating basins would be also located within the existing fence line of the plant. The pump station for the first phase would deliver irrigation water at low pressure to farmland south of the WCP, Plaza Park, and Valley Oaks Golf Course located east of the WCP. In the future, this pump station would potentially be upgraded to a larger high-pressure pump station that could deliver up to twice the flow to a second regulating reservoir east of SR-99.

Basin No. 4 Pipeline

The 60-inch-diameter pipeline to Basin No. 4 would flow from the WCP to the beginning of a westerly flowing ditch located just downstream of that ditch's takeoff point from Mill Creek. The ditch beyond the discharge point would carry flow downstream to Basin No. 4 at an estimated depth of less than 2.5 feet with freeboard of more than 2.5 feet. The existing Mill Creek turnout of Basin No. 4's ditch just upstream of the pipe discharge point would need to be modified, so that the future peak flow of 52 mgd would not back up into Mill Creek.

Tulare Irrigation District Pipeline

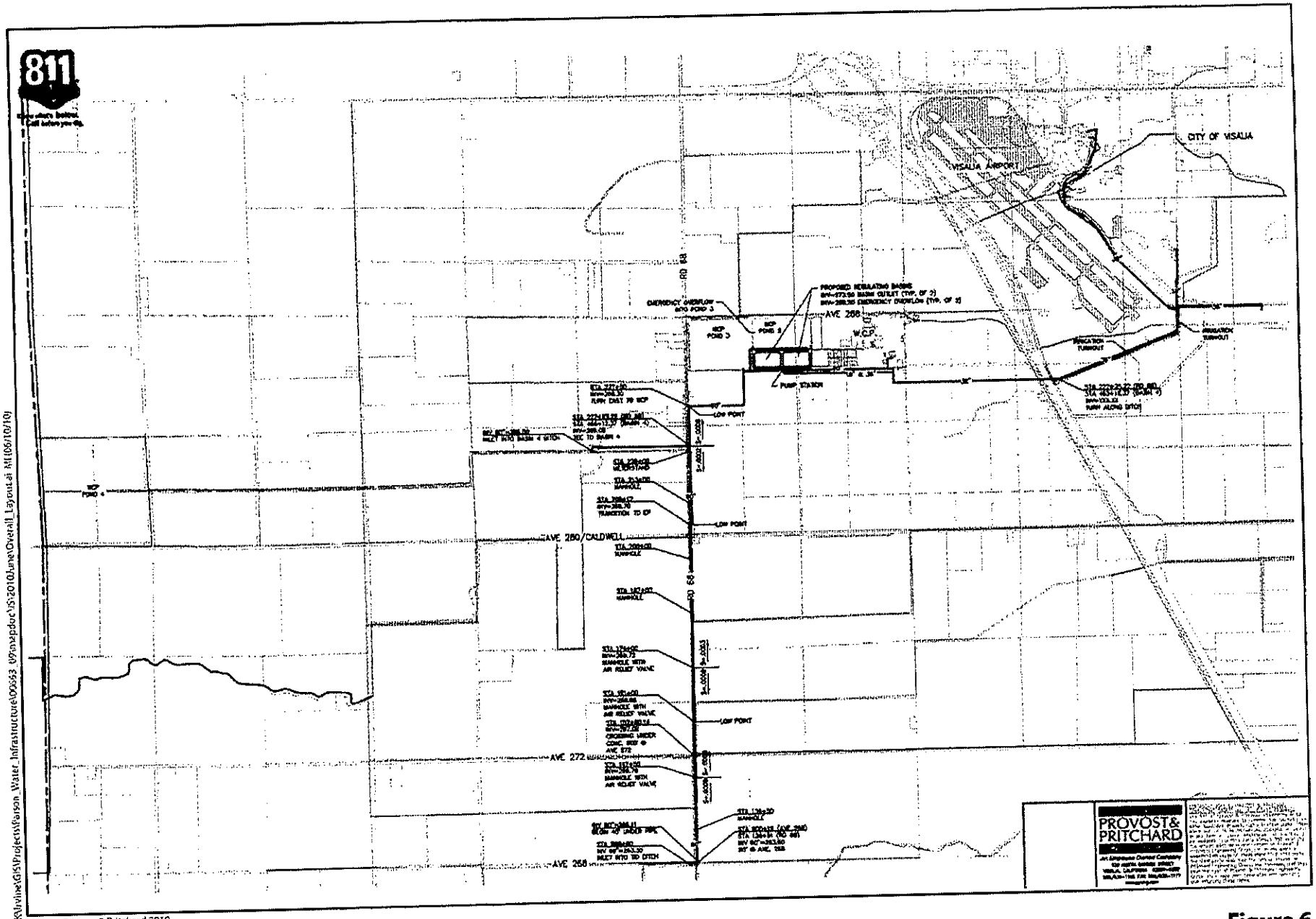
Irrigation water delivery would flow to the south, into TID boundaries with a 60-inch-diameter pipeline with two regulating basins at the upstream end located within the existing fence line of the plant. The proposed regulating basins for the TID pipeline have an operating basin water volume of 44 acre-feet. The regulating basin would allow for smoothing of variations in flow from the WCP and allow for reliable delivery of downstream flow. The top banks of the regulating basins would be slightly higher than the onsite WCP grades. The bottom of the basins would be approximately 5 feet below natural grade. This would allow the basins banks to be built with onsite materials with 3 feet of protective freeboard in the basin. The bottoms of the basins are proposed to be compacted to retard percolation, which would help maximize delivery of reuse water.

Water being delivered to TID would use that portion of the Basin No. 4 pipeline described above that runs westerly from the plant and then southerly paralleling Road 68. At the point where the Basin No. 4 pipeline turns to the west, a gated junction box is proposed to allow water to either go west to Basin No. 4 or to continue to the south in a 60-inch-diameter pipeline for delivery to TID. The junction box is about 10 to 12 feet in height above existing grade. The southerly 60-inch-diameter TID pipeline extension parallels Road 68 continuing south and discharges into a westerly flowing ditch that crosses Road 68 at Avenue 268. This ditch is owned by TID and would carry the design flows westerly to TID Basin No. 3 and other facilities and farmland within the TID for irrigation purposes. All of the water delivered at this point would be delivered to farmland or would go into basins within TID boundaries that would retain the reuse surface water. None of the ditches and basins in this area of the TID can flow to waters of the United States. A flow meter with ability to communicate with a recorder at the WCP is proposed in the vicinity of the inlet to the ditch at Road 68 and Avenue 268. This would allow the City and TID to track delivery quantities that would determine the volumes of TID waters that would be provided to the City in exchange for the reuse water. It is expected that a new inlet structure would replace the existing structure at the tie-in point at the southwest corner of the Road 68 and Avenue 268. This would likely be built by TID or be under TID control.

Irrigation Delivery Pipelines for Areas East of SR-99 and Immediately South of the WCP

Irrigation water to the east side of SR-99 is proposed to be delivered in a 36-inch-diameter pipeline. The pipeline would be designed for a higher pressure rating to accommodate future high-pressure use. The high-pressure pipeline would allow future phases that upgrade the system to carry approximately double the anticipated flow through the 36-inch-diameter pipe. Higher pressure and velocity will allow for delivery of flow to a future second regulating basin east of SR-99. Water for reuse could then be pumped from the basin into the reuse delivery pipelines and future easterly extensions of the reuse pipeline system.

Irrigation water delivery to 250 acres of farmland south of the WCP would continue. This would be in a separate, slightly higher pressure line connected to the existing 18-inch-diameter pipeline



K:\Invest\GIS\Projects\Parson_Water_Infrastructure\006693 (Parsons)doc\GIS\2010\MapDoc\Overall_Layout.ai 11/05/10 10:

Source: Provost & Pritchard 2010.

Figure 6

Proposed Recycled Water Conveyance System Alignments

ICF INTERNATIONAL

presently being used for delivery of secondary-treated effluent. In addition, the plant operators wish to plan for a future extension of pipelines to serve the full 900 acres of City-owned farmland that may connect to the system in the future.

In addition, there is a proposed 36-inch-diameter pipeline extending east in Walnut Avenue. This pipeline would provide water supply to the most easterly farmland south of Walnut Avenue. The pipeline is oversized for the farmland supply needed for this project and could have been made smaller. However, this size is proposed to allow for future extensions to the east and to allow for a second regulating basin to be placed in this area. The oversizing of this section of pipeline can be justified, because it would allow the system to potentially double its delivery capacity in the future without having to replace the pipeline in Walnut Avenue. The hydraulic analysis for this pipeline is left for a future phase, because there are too many unknowns regarding regulating basin placement and future flow requirements.

Water Exchange

The recycled water generated by the proposed project would be greater than the needs for direct use within the City at this time. Therefore, the City is proposing to enter into a water exchange(s) with TID and/or other public or private entity or entities to exchange recycled water generated by the plant for surface water that would be used to recharge the groundwater beneath the City proper. The recycled water would then be used for either irrigation or groundwater recharge purposes within the boundaries of the exchange partner. The surface water received by the City via the exchange would be used to augment its existing supplies of water that the City uses to recharge local groundwater. The cumulative analysis in the project's Environmental Impact Report (EIR) will include the proposed water exchange(s).

9. Surrounding Land Uses and Setting:

The existing WCP and proposed offsite recycled water conveyance system to the west and south of the plant are surrounded by agricultural and conservation lands. Proposed offsite recycled water conveyance system to the east of the plant and SR-99 are surrounded by agricultural, conservation, park, and airport lands.

10. Other Public Agencies Whose Approval is Required:

- San Joaquin Valley Air Pollution Control District (Rule 2010 permit);
- California Department of Transportation (right-of-way encroachment permit);
- City Planning Commission (conditional use permit [CUP]); and
- State Water Resources Control Board (SWRCB) (Statewide General Construction NPDES permit).

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a "potentially significant impact"), as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural and Forestry	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Geology/Soils
☒ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials	☒ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☒ Noise
☒ Population/Housing	☐ Public Services	☐ Recreation
☒ Transportation/Traffic	☒ Utilities/Service Systems	☒ Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

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

☐ I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would 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 an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

James K Ross — August 18, 2010

Signature — Date

James Ross — City of Visalia

Printed Name — For

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "no impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "no impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "no impact" answer should be explained if it is based on project-specific factors as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off site as well as on site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially significant impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "potentially significant impact" entries when the determination is made, an EIR is required.
4. "Negative declaration: less than significant with mitigation incorporated" applies when the incorporation of mitigation measures has reduced an effect from a "potentially significant impact" to a "less-than-significant impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level.
5. Earlier analyses may be used if, pursuant to tiering, program EIR, or other California Environmental Quality Act (CEQA) process, an effect has been adequately analyzed in an earlier EIR or negative declaration [Section 15063(c)(3)(D)]. In this case, a brief discussion should identify the following:
   a. **Earlier Analysis Used.** Identify and state where earlier analyses are available for review.
   b. **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c. **Mitigation Measures.** For effects that are "less than significant with mitigation incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, when appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a. the significance criteria or threshold, if any, used to evaluate each question; and
   b. the mitigation measure identified, if any, to reduce the impact to a less-than-significant level.

I. Aesthetics	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	☐	☐	☐	☒
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

a. **Less-Than-Significant Impact.** The proposed upgrades within the existing WCP footprint (e.g., headwork improvements, pump stations, MBR tanks, UV facilities, digester, support facilities, administration building, etc.) would not have a larger profile than the existing equipment and buildings within the footprint, and would look similar to existing structures at the plant. There are no scenic vistas designated by the City's general plan in the project area (City of Visalia 1991). Conveyance of recycled water would occur within existing irrigation canals and proposed below-grade pipelines and, therefore, would have no affect on scenic vistas in comparison to the baseline condition. One gated, concrete junction box is proposed to allow recycled water to either go west from the junction box to Basin No. 4 or to continue to the south in a 60-inch-diameter pipeline for delivery to TID. This junction box is located within City property on the east side of Road 68 about 2,000 feet south of the southwest corner of the existing plant. The box would be no higher than 10 to 12 feet above existing grade and would look similar to other existing concrete structures associated with existing irrigation canals and other water conveyance structures in the project area. Therefore, the placement of the junction box would not have a significant effect on a scenic vista. The proposed two regulating basins within the plant's existing fence line would be slightly higher than the onsite WCP grades, and would also not significantly affect scenic vistas. The surrounding topography is essentially flat and the proposed project components would not appreciably change the existing condition for affected viewers, namely travelers on SR-99 to the east and surrounding roads. The proposed project would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant and, therefore, this issue will not be discussed in the EIR.

b. **No Impact.** The proposed project is not located along a designated or proposed scenic highway (California Department of Transportation 2010). The nearest eligible highway to the project site is SR-198 to the north of the project (California Department of Transportation 2010). The eligible segment of SR-198 begins at the SR-99/SR-198 interchange and ends where SR-198 enters the boundaries of Sequoia National Park to the east (California Department of Transportation 2010). The closest the project comes to this eligible state scenic highway is about 2,000 feet south of the highway where the recycled water pipeline follows Plaza Drive and

then terminates. This portion of the recycled water pipeline closest to SR-198 would be below grade and, therefore, would not be seen from travelers along SR-198. Therefore, the proposed project would not substantially damage scenic resources along an eligible or approved scenic highway. There would be no impact, and, therefore, this issue will not be discussed in the EIR.

c. **Less-than-Significant Impact.** Minimal visual change would occur as a result of installing proposed upgrades within the WCP's footprint because the proposed structures would not have a larger profile, require the use of dissimilar materials, or be out of scale with the WCP's existing structures. Conveyance of recycled water would occur within existing irrigation canals and proposed below-grade pipelines and, therefore, would have no effect on the visual character or quality of the site and its surroundings in comparison to the baseline condition. The proposed junction box would be no higher than 10 to 12 feet above existing grade and would look similar to other existing concrete structures associated with existing irrigation canals and other water conveyance structures in the project area. Therefore, the placement of the junction box would not substantially degrade the existing visual character of the site and its surroundings. The proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. Impacts would be less than significant, and, therefore, this issue will not be discussed in the EIR.

d. **Less-than-Significant Impact.** The proposed project would include interior and security lighting, as needed, for the upgrades within the WCP footprint, but would not be of a greater intensity than existing lighting at the plant and would be required to comply with applicable lighting ordinances. Existing lighting is minimal for safety and security of the plant, and does not adversely affect daytime or nighttime views in the area. The proposed project would not create a new source of substantial light or glare. Impacts would be less than significant, and, therefore, this issue will not be discussed in the EIR.

II. Agricultural and Forestry Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
In determining whether impacts on 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. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	☐	☐	☒	☐
c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a. **No Impact.** Upgrades within the existing WCP's footprint would not affect farmland mapped by the Farmland Mapping and Monitoring Program (FMMP), because the footprint has already been developed for use as a wastewater treatment plant and is designated by the FMMP as Urban (California Department of Conservation 2008). The proposed recycled water conveyance

system consists of either existing irrigation canals or proposed below-grade pipelines. After construction of these facilities, the land can be used for existing purposes, including farming activities. The junction box would be placed within the existing irrigation canal to Basin No. 4 and, therefore, would not affect farmland. Therefore, development of the recycled water conveyance system would not convert lands mapped by the FMMP to nonagricultural use. And, therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to nonagricultural use and there would be no impact. This issue will not be discussed in the EIR.

b. **Less-than-Significant Impact.** As discussed in Section II, item (a.) above, upgrades within the existing WCP's footprint and the proposed recycled water conveyance system would not affect Farmland, including land zoning for agricultural use or under a Williamson Act contract. The offsite recycled water conveyance system is found within land zoned as Agriculture (A) by the City, but is not located within an area under a Williamson Act contract (City of Visalia 2010). With the issuance of a CUP, the project would be allowed on lands zoned A (City Municipal Code 17.08.040.D.). Additionally, the recycled water conveyance system includes underground pipelines that would not impede the use of lands above it from continuing to be farmed and the canals that are already in existence. The conditional allowance of the project, by definition, means that it would be consistent with agricultural zoning. Therefore, the project would not conflict with existing zoning for agricultural use or conflict with a Williamson Act contract. Impacts would be less than significant, and, therefore, this issue will not be discussed in the EIR.

c. **No Impact.** The project site and its surroundings are not zoned for and would not cause rezoning of forest land, timberland, or timberland zoned as Timberland Production (City of Visalia 2010). The project would not affect forestry resources. There would be no impact, and, therefore, this issue will not be discussed in the EIR.

d. **No Impact.** Refer to Section II, item (c.) above. There are no forests at the project site or within its surroundings. The project would not result in the loss of forest land or conversion of forest land to nonforest use. There would be no impact, and, therefore, this issue will not be discussed in the EIR.

e. **No Impact.** The project would not affect forest land (see Section II, items [c.] and [d.], above) or involve changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use (see Section II, items [a.] and [b.]). Therefore, the project would not involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to nonforest use, and there would be no impact. These issues will not be discussed in the EIR.

III. Air Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
When 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 a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
e. Create objectionable odors affecting a substantial number of people?	☒	☐	☐	☐

a. **Potentially Significant Impact.** The project site would be located entirely within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD), in the San Joaquin Valley Air Basin (SJVAB or basin). The SJVAPCD is classified by the State of California (state) as "severe nonattainment" for the state 1-hour ozone standard, as well as "nonattainment" for the state standards for particulate matter, which are described as smaller than or equal to 10 and 2.5 microns in diameter (PM10 and PM2.5, respectively). The basin is also classified as "extreme nonattainment" for the federal 8-hour ozone standard, "nonattainment" for the federal PM2.5 standard, and "attainment/maintenance" for the federal carbon monoxide (CO) and PM10 standards. Project construction activities would generate emissions of ozone precursors, nitrous oxides (NO_X) and reactive organic gases (ROGs), as well as CO, PM2.5, and PM10 emissions that could result in significant impacts to regional air quality. Emission sources would include (1) heavy equipment used for excavation and grading and (2) access areas and on-road motor vehicles for equipment and material deliveries, as well as workers commuting to and from the project site. Grading and activity on unpaved roads and lay-down areas would contribute to fugitive PM10 and PM2.5 emissions. Proposed onsite upgrades—e.g., interstage pump station, recycled water pump station—to the plant could also result in additional operational emissions beyond the existing condition that could conflict with or obstruct implementation of the applicable air quality plan. Further analysis of air quality impacts is warranted to determine whether the project would conflict with or obstruct implementation of the applicable plans for attainment and, if so, to determine the reasonable and feasible mitigation measures that could be imposed. These issues will be evaluated in the EIR.

b. **Potentially Significant Impact.** Short-term construction and operational emissions could significantly contribute to an existing or projected air quality violation of CO, PM2.5, PM10, or ozone standards, requiring the consideration of mitigation measures. This impact is potentially significant and will be evaluated further in the EIR.

c. **Potentially Significant Impact.** The SJVAPCD is classified by the state as "severe nonattainment" for the 1-hour ozone standard, as well as "nonattainment" for the state PM10 and PM2.5 standards. The SJVAB is classified as "extreme nonattainment" for the federal 8-hour ozone standard, "nonattainment" for the federal PM2.5 standard, and "attainment/maintenance" for the federal CO and PM10 standards. The SJVAPCD rules and regulations apply to all project activities. Cumulative contributions to this basin could be potentially significant. Construction and operational emissions will be evaluated in the EIR.

d. **Potentially Significant Impact.** A few rural residences (farmhouses) are located within the vicinity of the project site. Construction-related activities would result in diesel exhaust emissions and dust that could adversely affect air quality for the nearest sensitive receptors. Potential impacts to sensitive receptors will be evaluated as part of the EIR.

e. **Potentially Significant Impact.** The proposed offsite recycled water conveyance system and the 17-acre regulation basin would convey and store water treated to Title 22 standards. The project proposes to locate the proposed onsite administrative building upwind and away from the plant's processing facilities to minimize impacts of wastewater odor. The existing plant emits odors as a result of wastewater treatment, and an odor-control system is proposed to be added to the existing headworks to treat the foul air withdrawn from this area. Sludge bed improvements would not result in the expansion of the existing sludge bed area, and, therefore, it is not anticipated that such improvements would result in increased sludge-bed-related odor beyond the existing condition. Nonetheless, the project may result in objectionable odors affecting a substantial number of people. This issue would be further addressed in the EIR.

IV. Biological Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
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?	☒	☐	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
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, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
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?	☒	☐	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
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?	☐	☐	☐	☒

a. **Potentially Significant Impact.** The footprint of the existing plant does not appear to contain any suitable habitat for candidate, sensitive, or special-status species. However, the existing percolation ponds at the WCP may attract migratory birds and/or raptors protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. The proposed offsite recycled water conveyance system appears to be located predominantly within agricultural lands or existing rights-of-way. However, suitable habitat for candidate, sensitive, or special-status species may exist within areas proposed to be developed for the offsite recycled water conveyance system. Direct effects (i.e., mortality as a result of construction equipment) or habitat modifications as a result of the project that adversely affect species identified as candidate, sensitive, or special status would be a significant impact. These issues will be further discussed in the EIR.

b. **Potentially Significant Impact.** There do not appear to be any riparian (i.e., riverside) or other sensitive natural habitats within the footprint of the existing plant. There are a number of irrigation ditches in the area, such as the Persian Ditch and Mill Creek that the offsite recycled water conveyance system would traverse over or come in close proximity to. These nearby water features could contain riparian habitat. Additionally, scattered oak woodlands are located in the area of the proposed offsite recycled water conveyance system, and the facilities alignments could adversely affect these woodlands. Impacts to riparian or other sensitive natural habitats as a result of the project could be potentially significant. There may also be impacts as a result of removing the effluent discharge from Mill Creek to downstream habitats. These issues will be further discussed in the EIR.

c. **Potentially Significant Impact.** According to the National Wetland Inventory (NWI), there are a number of "freshwater pond," "lake," and "riverine" water features found within the project site (U.S. Fish and Wildlife Service 2010). The freshwater pond and lake water features are associated with the existing basins within the WCP footprint. The riverine water features are associated with irrigation ditches in the area, such as the Persian Ditch and Mill Creek. As discussed in Section IV, item (b.) above, because the offsite recycled water conveyance facilities would traverse over or come in close proximity to such water features, there is the potential that federally protected wetlands may be affected by the project. The existing water basins at the WCP are not likely connected to waters of the U.S., and, therefore, not likely federally-protected wetlands. Nonetheless, these issues will be further discussed in the EIR.

d. **Potentially Significant Impact.** The proposed project would not interfere with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors. Upgrades that occur within the existing plant's fence line would not further affect wildlife movement because the existing fence already deters movement. The offsite recycled water conveyance system consists of existing irrigation canals and proposed below-grade pipelines and, therefore, would also not sever a movement corridor for terrestrial species beyond the existing condition. Therefore, wildlife movement would not be significantly affected by the project.

   Proposed upgrades within the WCP footprint would eliminate a number of the existing basins to make room for proposed sludge drying beds and a stockpile area (see Figure 2). Migratory birds and/or raptors may use these existing basins as nursery sites for nesting purposes. The potential loss of nursery sites within the WCP footprint could be a potentially significant impact. Additionally, construction activities within the WCP footprint may result in noise levels or fugitive dust emissions severe enough to cause harassment and nest abandonment, which would be a violation of the MBTA and California Fish and Game Code and a potentially significant impact. These issues would be further discussed in the EIR.

   As discussed in Section IV, items (a.) and (b.), offsite recycled water conveyance system alignments may be found within areas that contain suitable habitat (e.g., riparian, wetland, or oak woodland) for use as a nursery site. The potential loss of offsite nursery sites could be a potentially significant impact. Additionally, offsite construction activities may result in noise levels or fugitive dust emissions severe enough to cause harassment and nest abandonment, which would be a violation of the MBTA and California Fish and Game Code and a potentially significant impact. These issues will be further discussed in the EIR.

e. **Potentially Significant Impact.** The City has a Valley Oak Ordinance (Visalia Municipal Code 12.24.010 *et seq.*) that prohibits the removal of valley oak trees (*Quercus lobata*) with a trunk diameter of 2 inches or greater at 4.5 feet above the root crown without first obtaining a removal permit. There are also restrictions on disturbing ground within a valley oak tree's "crown drip line."[1] The proposed offsite recycled water conveyance system appears to traverse areas of scattered oak woodlands. Damaging and removing valley oaks, including disturbance within an eligible tree's crown drip line without first obtaining a removal permit is a potentially significant impact. This issue will be further discussed in the EIR.

f. **No Impact.** The project site is not covered under an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. There would be no impact and, therefore, this issue will not be discussed in the EIR.

[1] The "crown drip line" is the outer perimeter of an oak tree's canopy.

V. Cultural Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☒	☐	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☒	☐	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

a. **Potentially Significant Impact.** Construction of the proposed project would require ground disturbance as well as demolition, replacement, and/or modifications to structures within the existing plant. The plant was in existence by 1939 (Huth 1939) and, therefore, the project could affect structures that are older than 50 years old, which is the criterion for historical consideration in accordance with federal and state laws. It is currently unknown whether the offsite recycled water conveyance system would affect historical resources. A Phase I Cultural Resources Technical Report will be prepared during the CEQA process for this project, and the EIR will discuss the results of the report to identify potential impacts to historical resources and offer any feasible mitigation measures to reduce impacts, if any. Potential impacts to historical resources, as defined in CEQA Section 15064.5, will be discussed in further detail in the EIR.

b. **Potentially Significant Impact.** It is currently not known whether there are known or unknown archaeological resources within the project footprint. The City of Visalia general plan's Conservation, Open Space, Recreation, and Parks Element states that potential unrecorded archaeological sites may exist within the general plan area, particularly along the undisturbed portions of creeks (City of Visalia 1989). A Phase I Cultural Resources Technical Report would be prepared during the CEQA process to identify potential impacts to archaeological resources and feasible mitigation measures, if applicable. The results of the report will be discussed in the EIR.

c. **Potentially Significant Impact.** It is currently unknown if there are known or unknown paleontological resources within the project footprint. A Phase I Cultural Resources Technical Report would be prepared during the CEQA process to identify potential impacts to paleontological resources and feasible mitigation measures, if applicable. The results of the report will be discussed in the EIR.

d. **Potentially Significant Impact.** There is no evidence that the proposed project site is located within an area likely to contain human remains; however, there is potential for inadvertent discovery of human remains during earthmoving and digging activities associated with the project. If human remains are discovered, excavation or disturbance would cease, as required by

Section 7050.5 of the California Health and Safety Code. If remains of Native Americans are identified, Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the Public Resources Code would be consulted for specific measures to address the finding of human remains. The potential for human remains to be discovered is considered a potentially significant impact and will be further discussed in the EIR.

VI. Geology and Soils	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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.	☐	☐	☐	☒
2. Strong seismic ground shaking?	☐	☐	☒	☐
3. Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐
4. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☒	☐	☐	☐
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☒	☐	☐	☐
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?	☒	☐	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

a.

1. **No Impact.** There are no known faults within Tulare County (County of Tulare 1975). Therefore, there are no underlying faults on or near the site that have the potential to expose people or structure to substantial adverse effects, including the risk of loss, injury, or death from the rupture of a known fault. There is no impact, and this issue will not be discussed in the EIR.

2. **Less-than-Significant Impact.** The known active faults that pose a hazard as a result of seismic ground shaking are the San Andreas fault to the west, the Owens Valley fault group to the east, and possibly the White Wolf fault to the south (County of Tulare 1975). Compliance with applicable building codes (including applicable

ordinances of the Visalia Building Code and the adopted California Building Standards Code, 2007 Edition (California Code of Regulations Title 24) and incorporation of seismic safety features would minimize the potential for significant impacts. Compliance with these codes is required for development of all structures by the City's Development Services Division. The Development Services Division reviews plans, issues building permits, and conducts building inspections to make sure that all new construction complies with City regulations. Project plans would be reviewed during the plan check process, which would ensure that necessary seismic safety measures in compliance with applicable building codes are incorporated. Incorporation of seismic safety measures required by the Development Services Division would minimize the potential for impacts to a less-than-significant level. Therefore, this issue will not be further discussed in the EIR.

3. **Potentially Significant Impact.** Liquefaction can occur in areas underlain by young alluvium where the groundwater table is higher than 50 feet below the ground surface. Depth to groundwater is currently unknown, but because of the proximity of the project site to Mill Creek and other irrigation canals, as well as its presence within Federal Emergency Management Agency (FEMA) Flood Zone A (City of Visalia 2009), the project site could be subject to liquefaction during seismic activity. The proposed upgrades would be constructed according to applicable building code standards, which are designed to minimize the effects of seismic-related ground failure, including liquefaction. Exposure of people or structures to seismic-related ground failure, including liquefaction, is a potentially significant impact and will be further discussed in the EIR.

4. **No Impact.** Site topography is relatively flat, and the nearest mountains are located more than 20 miles north of the project. Improving the project site with upgrades to the existing plant, including an administration building, parking lot, and underground pipelines construction, would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. There would be no impact, and this issue will not be discussed in the EIR.

b. **Potentially Significant Impact.** The project site is relatively flat; however, grading activities for the construction of the administration building and parking lot would be required in addition to other ground-disturbing activities associated with the installation of the proposed recycled water pipelines and construction of the regulation basins. Because the project disturbs at least 1 acre of soil, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared to describe measures that would be employed to avoid or minimize erosion impacts from construction activities such as grading (see Section IX, item [a.] for more information). Drainage plans and stormwater permits would attempt to avoid or minimize impacts during construction.

   Drainage plans would be prepared to avoid or minimize impacts to the existing drainage pattern of the site during the operational period. However, at this time, a drainage plan has not been prepared for the project; therefore, it is unknown whether a drainage plan would effectively reduce operational soil erosion potential to less than significant. This issue will be further discussed in the EIR.

c. **Potentially Significant Impact.** It is currently unknown whether the project footprint is located on a geologic unit or on soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse. These issues will be further discussed in the EIR.

d. **Potentially Significant Impact.** It is currently unknown whether the project footprint is located on expansive soil. This issue will be further discussed in the EIR.

e. **No Impact.** The proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. There is no impact, and this issue will not be discussed in the EIR.

VII. Greenhouse Gas Emissions	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

a. **Potentially Significant Impact.** The principal greenhouse gases (GHGs) are carbon dioxide (CO_2), methane (CH_4), NO_X, ozone, water vapor, and fluorinated gases. Fossil-fuel consumption in the transportation sector (e.g., motor vehicles, aircraft, etc.) is the single largest source of human-created GHG emissions. Construction activities associated with heavy equipment operation, truck deliveries, and construction worker commute trips would temporarily generate GHGs. Operation of the project would also generate GHG emissions from energy use to run the plant. It is currently unknown whether this energy use would be greater than the baseline condition as a result of existing operations at the plant, but the need to pump recycled water through the conveyance system would likely result in increased operational GHG emissions. The quantity of GHG emissions generated by the construction and operation of the project would be quantified in the EIR to determine whether the project would result in a significant impact on the environment. Potential impacts will be further evaluated in the EIR.

b. **Potentially Significant Impact.** Regarding GHGs, the state has passed several bills and the governor has signed a number of executive orders. Assembly Bill (AB) 32, the Global Warming Solutions Act, was passed by state legislature on August 31, 2006. The act requires that the state's global-warming emissions be reduced to 1990 levels by 2020. The reduction would be accomplished through an enforceable statewide cap on GHG emissions beginning in 2012. The potential for the project to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs will be further discussed in the EIR.

VIII. Hazards and Hazardous Materials	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site that 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?	☐	☐	☐	☒
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
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?	☐	☐	☒	☐

a. **Less-than-Significant Impact.** As part of the construction phase for the proposed project, contractors would use a variety of petrochemicals—including fuels and lubricants—to operate the heavy equipment used for site preparation. The presence and use of these materials, which are classified as "hazardous materials," would create the potential for accidental spillage and exposure of workers and neighboring residents to these substances. Grading and construction activities such as the fueling of construction equipment would require the transport, storage, and use of these and other hazardous materials. All applicable safety standards for the safe handling and use of these materials would be adhered to, which would minimize the potential

for and effects from spills of hazardous, toxic, or petroleum substances during construction activities. There are no designated routes for the transport of hazardous materials located on or immediately adjacent to the proposed project. Compliance with the requirements set forth in the U.S. Code and the California Health and Safety Code would be required, and would reduce construction impacts to a less-than-significant level.

The proposed project would result in the upgrades to the existing plant, and these upgrades will require the use of two new chemicals during operation: (1) citric acid to assist in the cleaning of the bioreactor membranes, and (2) a polymer to assist in the digested sludge dewatering process. The use of UV technology will discontinue the large-scale use of chlorination chemicals for disinfection; however, chlorine chemicals will still be needed to help control upsets in the biological treatment process, to assist in the cleaning of the bioreactor membranes, and to provide an as-needed residual for the UV disinfection process. Any chemicals considered hazardous that are used in conjunction with the operation of the plant would be transported, stored, and used only in accordance with the manufacturer's instructions contained in the applicable material safety data sheet (MSDS) for a given product. Any hazardous chemical would be disposed of in accordance with the County Environmental Health Services Department, the City Community Development Department, and the City Quality Assurance Division standards. Effluent would be compliant with current and future NPDES requirements that are more stringent than current requirements, and the biosolids produced by the wastewater treatment process would be disposed of in accordance with Code of Federal Regulations (CFR) 40 CFR 503. Impacts would be less than significant. This issue will not be discussed in the EIR.

b. **Less-than-Significant Impact.** The project site does not contain any hazardous materials sites; however, there are five known active or open remediation cases within 2 miles of the proposed project site, located near the airport to the east (Department of Toxic Substances Control 2010; SWRCB 2010). As discussed under Section VIII, item (a.), above, the use of hazardous materials would be limited to common substances associated with construction vehicles (i.e., gasoline, hydraulic oil, and grease), as well as citric acid and a polymer during operation.

   The proposed project would be subject to all local, state, and federal laws pertaining to the use of hazardous materials on site and would be subject to review by the County Environmental Health Services Department, the City Community Development Department, and the City Quality Assurance Division. Through the review process, the proposed project would be required to submit a complete list of all materials used on site, how the materials would be transported, and in what form they would be used to maintain safety and prevent possible environmental contamination or worker exposure. MSDS for all applicable materials present at the sites would be made readily available to onsite personnel. Project construction would not create a significant environmental hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant. This issue will not be discussed in the EIR.

c. **No Impact.** The proposed project site is located in a predominately rural area in southwestern Visalia, and there are no schools within a quarter mile of the proposed project. The school nearest to the wastewater treatment plant is the Delta View Elementary School, located at 1201 Lacey Boulevard, approximately 3.5 miles west of the project. The school nearest to the recycled water conveyance system is the Hurley Elementary School, located at 6600 West Hurley Avenue, about 1.5 miles east of the recycled water conveyance system near the airport. Therefore, there would be no impact. This issue will not be discussed in the EIR.

d. **No Impact.** The proposed project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List). There are a total of four sites within the city of Visalia that are listed on the Cortese List, and the site nearest to the project is located about 2 miles north of the site at 6941 West Goshen Avenue, Visalia, CA, 93291. Therefore, there would be no impact and this issue will not be discussed in the EIR.

e. **Less-than-Significant Impact.** The proposed project is located within the Tulare County Airport Land Use Compatibility Plan (TCALUCP) area. The Tulare County Airport Land Use Commission reviews all project proposals within the TCALUCP for consistency with height requirements, ground safety, noise compatibility, and balancing land development within traffic patterns of existing public use airports. Construction activities would occur adjacent to the airport site and compliance with applicable safety measures per the TCALUCP would be required to extend the proposed recycled water conveyance system south and east of the Visalia Municipal Airport. However, construction equipment required for the construction of facilities near the airport would be typical of equipment used for constructing underground pipelines (e.g., backhoes, trenchers, bulldozers, small wheeled cranes, etc.) and not be of a sufficient height that could affect airplane approaches or result in result in a safety hazard for people residing or working in the project area. Construction activities would have to be reviewed and approved by the Tulare County Airport Land Use Commission. During the operational period, proposed recycled water conveyance system would consist of below-grade pipes that would not affect airplane approaches or result in a safety hazard for people residing or working in the project area. Impacts would be less than significant and this issue will not be discussed in the EIR.

f. **No Impact.** There are no known private airstrips within the vicinity of the proposed project site. Therefore, there would be no impact. This issue will not be discussed in the EIR.

g. **Less-than-Significant Impact.** The proposed project would not physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the site. The site is located in a rural area with several local roads providing access to the site in the event of an emergency. Therefore, no impacts related to the impairment of or the physical interference with an adopted emergency response plan or emergency evacuation plan is anticipated. Impacts would be less than significant. This issue will not be discussed in the EIR.

h. **Less-than-Significant Impact.** During construction, all vehicles and crews working at the project site would have access to functional fire extinguishers at all times. In addition, crews are required to have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks.

Although the project footprint is almost completely surrounded by native habitat that could be described as wildland, there is nothing inherent to the operations of the project that requires the extensive use of flammable substances. The area within the plant's fence line is devoid of appreciable vegetation, and flammable debris would not be stockpiled as a result of the project. The proposed 17-acre regulatory basin and offsite pipelines are not flammable. Therefore, the proposed project would not 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. Impacts are less than significant, and this issue will not be discussed in the EIR.

IX. Hydrology and Water Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in 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 that would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	☒	☐	☐	☐
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	☒	☐	☐	☐
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☒	☐	☐	☐
f. Otherwise substantially degrade water quality?	☐	☐	☐	☒
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 flood hazard delineation map?	☐	☐	☐	☒
h. Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☒	☐	☐	☐
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?	☒	☐	☐	☐
j. Contribute to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

a. **Less-than-Significant Impact.** The project is located within the CVRWQCB District and would be required to prepare a SWPPP in compliance with the requirements of the NPDES General Construction Permit. The SWPPP would prescribe temporary Best Management Practices (BMPs) to control wind and water erosion during and shortly after construction of the project, as well as permanent BMPs to control erosion and sedimentation once construction is complete. Because the applicant would prepare and implement a SWPPP and adhere to state regulations, it is anticipated that during the construction period, the project would not violate any water quality standards or waste discharge requirements, and impacts would be less than significant.

   One of the primary purposes of the project is to improve effluent water quality to Title 22 standards and to no longer require compliance with WDR Order No. R5-2006-0091, which allows the current discharge of effluent into Mill Creek. As part of the project, the City plans to discontinue the discharge to Mill Creek and divert the plant discharge to the recycled water conveyance system. These proposed actions would improve effluent water quality and would no longer require compliance with the current WDR. The proposed project would achieve compliance with current and anticipated future NPDES requirements, and the proposed project would be in conformance with the applicable basin plan. The sludge beds would be lined to ensure that groundwater would not be affected by the sludge drying process—this is a beneficial impact in comparison to the existing condition. No impacts that would adversely affect surface or groundwater water quality are expected to occur because water quality and sludge processing would improve. There would be no operational water quality impact as a result of the proposed project; therefore, the project would not violate any water quality standards or WDR during the operational period, and impacts would be less than significant. These issues will not be further discussed in the EIR.

b. **No Impact.** A primary purpose of the project is to treat wastewater to Title 22 standards in order to use the treated effluent for irrigation and groundwater recharge purposes. Once treated, the recycled water would provide an additional source of water for groundwater recharge that is not currently available to the City. The sludge beds would be lined to ensure that groundwater would not be affected by the sludge drying process—this is a beneficial impact in comparison to the existing condition. Therefore, the project would enhance groundwater supplies, aid with groundwater recharge, and improve groundwater quality, which are beneficial impacts. This issue will not be further discussed in the EIR.

c. **Potentially Significant Impact.** The proposed project and the surrounding area are topographically flat. The project is located within FEMA Flood Zone A (City of Visalia 2009), and construction of the proposed project could potentially alter the existing drainage pattern of the site. Drainage plans would be prepared to avoid or minimize impacts on the existing drainage pattern of the site during the operational period and would not result in erosion or siltation. However, at this time, a drainage plan has not been prepared for the project; therefore, it is unknown whether a drainage plan would result in substantial erosion or siltation on site or off site. This issue will be further discussed in the EIR.

d. **Potentially Significant Impact.** The proposed project and the surrounding area are topographically flat. The project is located within FEMA Flood Zone A, and construction of the proposed project could potentially alter the existing drainage pattern of the site. Drainage plans would be prepared to avoid or minimize impacts on the existing drainage pattern of the site, to ensure that proper drainage is maintained during the operational period, and would not result in the increase in runoff that could result in flooding on or off site. However, at this time, a

drainage plan has not been prepared for the project; therefore, it is unknown whether a drainage plan would result in flooding on or off site. This issue will be further discussed in the EIR.

e. **Potentially Significant Impact.** The project would result in the increase of impervious surfaces as a result of the construction of new onsite structures and a parking lot. Drainage plans would be prepared to avoid or minimize runoff water so that it would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. However, at this time, a drainage plan has not been prepared for the project; therefore, it is unknown whether a drainage plan would be adequate to convey runoff and properly treat runoff as a result of the project. These issues will be further discussed in the EIR.

f. **No Impact.** The proposed upgrades would produce high-quality effluent to Title 22 standards that is of a higher water quality than existing effluent produced by the plant. The sludge beds would be lined to ensure that groundwater would not be affected by the sludge drying process—this is an improvement in comparison to the existing condition. These upgrades and sludge-bed lining are beneficial impacts of the project. Therefore, the project would not otherwise substantially degrade water quality, and this issue will not be discussed in the EIR.

g. **No Impact.** The proposed project does not include housing. Therefore, there would be no impact, and this issue will not be discussed in the EIR.

h. **Potentially Significant Impact.** The existing wastewater treatment plant is completely located within FEMA Flood Zone A. The proposed administration building also would be located within Flood Zone A. Portions of the recycled water conveyance system are also within Flood Zone A. Drainage plans would be prepared to ensure that the project would not impede or redirect flood flows. However, at this time, a drainage plan has not been prepared for the project; therefore, it is unknown whether a drainage plan would impede or redirect flood flows. This issue will be further discussed in the EIR.

i. **Potentially Significant Impact.** The project is located approximately 27 miles west and south of the Terminus Dam and is within an area that would be subject to dam inundation if the Terminus Dam were to fail. As such, impacts are regarded as potentially significant and will be discussed further in the EIR.

j. **No Impact.** The proposed project is not located near an ocean or an enclosed body of water, and would not be subject to inundation by a seiche or tsunami. Mudflows are a type of mass wasting or landslide, where saturated earth and surface materials are rapidly transported downhill under the force of gravity. The nearest mountains are more than 20 miles north of the project, and, therefore, there is no potential for structures to be inundated by mudflow. There would be no impact, and these issues will not be discussed in the EIR.

X. Land Use and Planning	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a. **No Impact.** The proposed project is located in a rural and predominately agricultural setting within the southwestern portion of the city of Visalia and unincorporated Tulare County. Areas surrounding the project generally include farming operations with related single-family residential buildings. The proposed project would include a variety of upgrades within the existing wastewater treatment plant and would install new pipelines to convey treated wastewater to surrounding areas. Because the project would involve changes to the existing facilities within the plant's fence line, use existing irrigation ditches, and install new pipelines underground within existing roadways, easements, and ditches, the project would not physically divided an established community. There would be no impact, and this issue will not be discussed in the EIR.

b. **Less-than-Significant Impact.** The proposed project includes approval of a CUP to allow for the upgrade of facilities associated with the plant as well as a recycled water conveyance system. The portions of the project site within unincorporated Tulare County include the County general plan land-use designation of "Rural Valley Lands Plan" (County of Tulare 2001) and the Tulare County Zoning Code designation of "Exclusive Agricultural–40-Acre Minimum (AE-40)." The portions of the proposed project within the city of Visalia include the City general plan land-use designations of "Agriculture," "Public Institutional," "Park," and "Conservation" (City of Visalia 1991) and the City Zoning Code designations of "Agriculture (A)", "Quasi-Public (QP)," and "Airport (AP)." The approval of the CUP would allow for the modifications to the existing operations of the plant, and the development of the recycled water conveyance system would be allowed within existing easements. The project would not expand capacity at the plant (currently 22 mgd) at this time, but all proposed facilities would be designed with provisions for future expansion of plant capacity to 26 mgd. Additional improvements to the WCP beyond the proposed onsite facilities analyzed in this document would be necessary to ultimately increase design capacity at the plant to 26 mgd. These additional improvements would be required to undergo their own separate environmental clearance process. The ultimate expansion of the plant, once additional future improvements (not a part of this project) are in place, would accommodate "planned" growth as envisioned by the City general plan. As a result, no conflicts

are expected to occur upon project implementation, and impacts are considered to be less than significant. This issue will not be further discussed in the EIR.

c. **No Impact.** As discussed above in Section IV, Biological Resources, the proposed project is not within an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur and this issue will not be further discussed in the EIR.

XI. Mineral Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

a. **No Impact.** Tulare County contains various active and closed aggregate mining operations for sand, gravel, and stone. According to the U.S. Geological Survey Mineral Resources Data System, no mineral resources have been identified within the project footprint, and no known mineral resources are within 10 miles of the proposed project site (U.S. Geological Survey 2010). No mineral resources have been identified on site by the County general plan (County of Tulare 2001) or any other applicable land use plan, and implementation of the proposed project would not 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. As such, the project would not 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 of California. The project would have no impact on future mineral development, and this issue will not be discussed in the EIR.

b. **No Impact.** Refer to Section XI, item (a.), above. There would be no impact, and this issue will not be discussed in the EIR.

XII. Noise	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	☒	☐	☐	☐
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☒	☐	☐	☐
e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐
f. Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a. **Potentially Significant Impact.** While long-term operations of the proposed project are not expected to exceed standards established by the County or the City's general plans or municipal codes, short-term noise associated with construction activities could potentially expose surrounding residences to noise levels that exceed existing noise ordinances and general plan noise guidelines. Long-term operational noise impacts are not considered significant because the upgrades would result in similar noise impacts as the existing plant's, and there are no sensitive receptors within the immediate vicinity of the plant. The plant is far enough away from urbanized areas that any noise impacts would be attenuated. Operational noise impacts as a result of the recycled water conveyance system would consist of water moving through the system, and this sound would not result in a significant impact. Noise impacts from construction are considered to be potentially significant and will be further evaluated in the EIR.

b. **Potentially Significant Impact.** Groundborne vibration and noise could originate from earth movement during the construction phase of the proposed project associated with the installment of the recycled water conveyance system. The project would be expected to comply with all applicable requirements for long-term operation and with measures for reducing excessive groundborne vibration. Impacts related to noise vibration are potentially significant and further analysis would be provided in the EIR.

c. **Less-than-Significant Impact.** The upgrading of facilities at the existing plant site would not result in a significant increase in permanent ambient noise levels, and the recycled water conveyance system would result in minimal noise (i.e., the sound of moving water) because the facilities would be underground or within existing drainage ditches that currently convey water. Long-term operational noise impacts are not considered significant because the upgrades would result in similar noise impacts as the existing plant's, and there are no sensitive receptors within the immediate vicinity of the plant. The plant is far enough away from urbanized areas that any noise impacts would be attenuated. Impacts are less than less than significant, and this issue will not be discussed in the EIR.

d. **Potentially Significant Impact.** Construction activities within the existing plant's fence line and along the discharge pipelines would cause a temporary or periodic increase in ambient noise levels. While construction activities would likely occur typically during daylight hours, mitigation measures would be implemented to reduce impacts to the maximum extent possible. Project-related construction noise levels would be further evaluated in the EIR.

e. **Less-than-Significant Impact.** The existing plant is located within 1 mile of the Visalia Municipal Airport, and the proposed pipeline improvements would be located along the eastern and southern areas of the airport. The proposed project would not involve residential structures, and, as such, the project would not result in the exposure of excessive noise levels to people residing in the area as a result of airport noise. Construction activities within and near the airport may expose workers to excessive noise levels; however, construction activities are short-term and would not permanently expose people working within the project area to excessive noise levels. As a result, impacts are considered to be less than significant, and this issue will not be discussed in the EIR.

f. **No Impact.** The proposed project is not located within the vicinity of a private airstrip; therefore, the proposed project would not result in impacts resulting from the exposure of people to excessive noise levels. This issue will not be discussed in the EIR.

XIII. Population and Housing	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☒	☐	☐	☐
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a. **Potentially Significant Impact.** Although the proposed project would result in the expansion and upgrade of an existing facility, new employment associated with the project would occur in the short term only, and long-term operations are not expected to change in terms of employees. Construction activities to build the proposed project would necessarily result in construction workers to travel to the site from various locations around Tulare County, and the number of workers expected to relocate to the surrounding areas is not expected to be substantial. The anticipated number of temporary construction workers needed for the project is fifty, and construction of the project would occur in one phase that is projected to begin in July 2011 and end in June 2013. If temporary housing should be necessary, it is expected that accommodations would be available in the nearby cities of Corcoran, Tulare, or Hanford. As such, the proposed project would not directly or indirectly induce the development of new housing or businesses.

Indirect impacts related to population growth could result from the creation of the recycled water conveyance system. The project would allow for the diversion of treated wastewater from Mill Creek to be used for public landscaped areas, a golf course, surrounding agricultural areas, and groundwater recharge, thus supporting water conservation efforts. However, the project would also allow the possible water exchange of treated effluent (to use for groundwater recharge and irrigation purposes) for potable water (to use for municipal supply purposes), which would increase the availability of potable water for the city. In other words, the use of reclaimed water would increase the amount of potable water available from existing water entitlements. While the project would contribute to the state's water conservation goals, it also provides a new source of potable water to the city that could remove an impediment to growth (i.e., the availability of potable water). It is currently unknown whether the project would indirectly induce substantial population growth in an area by providing an additional source of water. This issue will be further discussed in the EIR.

b, c. **No Impact.** The proposed project would result in upgrades to an existing plant and the installment of a pipeline system for the disposal and reuse of treated effluent within existing irrigation ditches and below-grade pipelines. The project would not displace any housing units or persons and no replacement housing would need to be constructed elsewhere; therefore, no impacts are expected to occur. These issues will not be discussed in the EIR.

XIV. Public Services	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

a. Fire protection

Less-than-Significant Impact. Fire protection services for the project are currently provided by the City Fire Department, which serves 118,000 people within a 35-square-mile area. The fire station closest to the project site is Fire Station No. 53, located at 9500 Airport Drive, which is less than 1 mile east of the project (City of Visalia 2010a). The project would result in the construction of a new administration building and parking lot; however, the building would be required to be built pursuant to state and local fire codes, and the City Fire Department would review the project to ensure adequate access for fire trucks and other firefighting vehicles. A significant impact is not expected to occur as a result of the project. This issue will not be discussed in the EIR.

Police protection

Less-than-Significant Impact. Police protection services for the plant are provided by District 2 of the city, located at 4100 S. County Center Drive, approximately 5 miles west of the proposed project (City of Visalia 2010b). Police services are already provided for the existing plant, and the upgrading of facilities would not have a significant impact requiring the expansion of police protection services. As such, impacts to police protection would be less than significant. This issue will not be discussed in the EIR.

Schools

Less-than-Significant Impact. The project would require a temporary construction force of about 50 workers for a 24-month period. Given the 24-month construction schedule, it's unlikely that construction workers would relocate their families into the Fresno area as a result of the project. The workers would likely relocate temporarily and leave their families behind for

the project duration. Also, because the plant would not increase capacity at this time and because of the upgrades to the SCADA system at the plant to increase efficiency and command and control at the plant, no new permanent jobs are anticipated to be created as a result of the project. A temporary increase in population would occur during the construction phase of the proposed project; however, any increase would be small and temporary. Therefore, substantial temporary increases in population that would adversely affect local school populations in the city and unincorporated Tulare County are not expected to occur. There would be no increase in permanent employees at the plant, and there would be no permanent increase in population as a result of the proposed project. Impacts on schools would be less than significant. This issue will not be discussed in the EIR.

Parks

Less-than-Significant Impact. There are no expected operational or permanent increases in the number of onsite employees as a result of the project. The project would not require new or expanded park facilities to maintain acceptable service ratios or to meet other performance objectives. Impacts on parks would be less than significant. This issue will not be discussed in the EIR.

Other public facilities

Less-than-Significant Impact. As the proposed project is not expected to result in a substantial increase in population during construction or operation of the proposed project, it is not expected that project impacts would result in the construction of new or expanded post office or library facilities to maintain acceptable service ratios or to meet any other performance objectives. Impacts are considered to be less than significant. This issue will not be discussed in the EIR.

XV. Recreation	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

a, b. **Less-than-Significant Impact.** The proposed project would not include new recreational facilities. No substantial increase in population during construction or operation of the proposed project is expected. As a result, there would not be a substantial increase in the use of regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. Additionally, the project would not require the construction or expansion of recreational facilities, resulting in an adverse physical effect on the environment. As such, impacts to recreational facilities would be less than significant. These issues will not be discussed in the EIR.

XVI. Transportation/Traffic	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐
b. Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
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?	☐	☐	☐	☒
d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e. Result in inadequate emergency access?	☐	☐	☒	☐
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

a. **Potentially Significant Impact.** Access to the project site is provided by Avenue 288, which travels in an east-west direction along the project's northern boundary. Construction activities would require additional construction-related trips from workers traveling to and from the site and delivery of materials. Delivery of construction materials would require oversized vehicles that would travel at slower speeds than existing traffic; they may intrude into adjacent travel lanes, reducing existing level of service (LOS) on area roadways and intersections. There are no bicycle paths or bus routes on adjacent roadways, and impacts to these facilities are not expected to occur. Additionally, the project would require jack-and-bore operations to construct a pipeline under the SR-99 freeway for the proposed recycled water system. This part of the project would require a California Department of Transportation right-of-way encroachment permit, and could temporarily affect traffic along SR-99. Traffic generation counts would be prepared for the project, and potential impacts would be evaluated in the EIR.

b. **Potentially Significant Impact.** Construction of the project would result in increased vehicle trips on local and surrounding roadways; however, construction workers are expected to travel to the site from various locations throughout the region. A relatively small number of construction workers are expected, and, when considered in context of the region, increased trips are not expected to result in a substantial number of trips. Construction of the project would generate construction trips related to materials delivery and larger construction-related vehicles that may require roadway lane closures. Additionally, the project would require jack-and-bore operations to construct a pipeline under the SR-99 freeway for the proposed recycled water system, which could temporarily affect traffic on SR-99. It is currently unknown whether the project would violate applicable standards during the construction and operational periods. Construction-related traffic impacts are potentially significant, and this issue will be further discussed in the EIR.

   Once constructed, operations at the facility would remain as they are in the existing condition, with no expected rise in the number of employees at the plant. Offsite facility improvement would include underground pipelines and, therefore, pose no potential for an increase of employees. The project's operational impacts on the City's traffic and circulation system are not expected to be significant. Operational impacts will not be discussed in the EIR.

c. **No Impact.** The existing plant site is located within 1 mile of the Visalia Municipal Airport, and recycled water pipeline infrastructure is proposed to be underground adjacent to the southern and eastern portions of the airport. Construction equipment required for the construction of the recycled water conveyance system near the airport would not be of a sufficient height that could affect air traffic patterns or result in other associated risks. The proposed improvements within the plant's fence line are too far away and not of a sufficient height to affect air traffic patterns or pose any other risks associated with air travel. The proposed recycled water conveyance system would be located underground or use existing irrigation ditches and would not have an impact on air traffic patterns or associated safety risks. There would be no impact and this issue will not be discussed in the EIR.

d. **Less-than-Significant Impact.** Project-related traffic is expected during project construction and during daily site operations. Project traffic would enter and exit from Avenue 288 at the proposed administration building entrance, and parking would be located in a new lot located away from the plant's process facilities to avoid conflict with the plant's operations. Internal circulation would be improved to accommodate delivery trucks and visitors. All proposed access and circulation improvements within the plant's fence line would be reviewed by the City's Public Works Department–Streets Division in accordance with local roadway and parking construction standards to avoid or minimize design features that would result in a substantial increase in hazards. The project would not permanently change the design or alignment of any public road. The project would not change or cause the change of current uses at or around the plant and, therefore, would not introduce any new incompatible uses. The recycled water conveyance system is not an incompatible use with surrounding uses because it would be either underground or with the use of existing irrigation ditches. Impacts would be less than significant. This issue will not be discussed in the EIR.

e. **Less-than-Significant Impact.** Construction activities would generate additional construction trips compared to existing conditions and could potentially result in lane closure or interruptions to Avenue 288, which travels in an east-west direction along the project's northern boundary. These temporary increases in daily traffic volumes on local roadways and

intersections would not impede emergency access. The project is located in a semi-rural and remote agricultural area with minimal existing traffic. Traffic created by the project could easily be diverted to adjacent roadways that surround the project footprint, and the potential for project-related traffic resulting in inadequate emergency access would be less than significant. This issue will not be discussed in the EIR.

f. **Less-than-Significant Impact.** Construction of the proposed project would generate construction trips and could result in potential roadway lane closure, temporarily disrupting any bicycle traffic on local roadways; however, because of the rural agricultural setting surrounding the project, there are no bus stops or designated bicycle lands that are likely to be used during construction and operation; impacts would be less than significant. This issue will not be discussed in the EIR.

XVII. Utilities and Service Systems	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
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?	☒	☐	☐	☐
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	☐	☐	☐	☒
e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

a. **Less-Than-Significant-Impact.** The plant currently is in compliance with WDR Order No. R5-2006-0091 issued by the CVRWQCB. The proposed project would comply with this current WDR and future NPDES requirements established by the CVRWQCB. As part of the project, the City would discontinue the discharge of treated effluent into Mill Creek (a water of the United States) and instead discharge the effluent to a recycled water conveyance system. By no longer discharging to Mill Creek, the City would no longer need an NPDES permit and instead would need to obtain a WDR permit from the CVRWQCB. The current WDR and future NPDES set limits on pollutants that are discharged from the plant in order to protect beneficial uses of surface and groundwater and to preserve water quality objectives outlined in the Water Quality Control Plan for the Tulare Lake Basin (CVRWQCB 2002). Effluent water quality requirements of this future WDR permit would be more stringent than the current WDR permit for the plant. For example, the City is anticipating that nitrogen-limit concentrations would be imposed by the CVRWQCB in the future; therefore, the City is including denitrification of the plant effluent as part of the upgrades. The CVRWQCB mandates that the plant comply with the current WDR and future WDR requirements, and the CVRWQCB has the authority to impose penalties on the City

if its plant does not comply with applicable permits. Additionally, the upgrades at the plant would allow for the treatment of recycled water to Title 22 standards, which are far more stringent than typical effluent water quality standards imposed on wastewater treatment plants by the CVRWQCB. Therefore, the project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, and impacts would be less than significant. This issue will not be further discussed in the EIR.

b. **Potentially Significant Impact.** The purpose of the proposed project is to construct new facilities for the treatment and conveyance of recycled water at the existing wastewater treatment plant. Based on the analysis presented in this initial study, the construction of the proposed upgrades could potentially cause significant environmental effects. This issue will be further discussed in the EIR.

c. **Potentially Significant Impact.** New impervious surfaces would be created by the construction of the proposed administration building and the associated parking lot, and groundwater may be used during construction activities for dust control. However, these changes would not substantially increase the amount of stormwater runoff. The project site and surrounding areas are drained by natural stream channels and do not rely on constructed stormwater drainage systems. The project would comply with the state's NPDES General Construction Permit through implementation of the SWPPP to contain water on site during construction. Also, the project would require the approval of a CUP, which includes the preparation of a drainage plan for review by the City Engineering Department. However, at this time, a drainage plan has not been prepared for the project; therefore, it is unknown whether a drainage plan would effectively reduce operational soil erosion potential to less than significant. This issue will be further discussed in the EIR.

d. **No Impact.** The plant's potable water provider would have sufficient water supplies available to serve the project from existing entitlements and resources; new or expanded entitlements would not be needed. The project would construct a new administration building that would be served by existing water supplies. The project would not increase the amount of employees at the plant during operations, and, therefore, would not increase demand for potable water at the plant. The project would help offset the demand for potable water by providing reclaimed water to areas that currently use potable water for landscaping, groundwater recharge, etc. No new entitlements are needed for the project, and no impact would occur. This issue will not be discussed in the EIR.

e. **No Impact.** The purpose of the proposed project is to upgrade the plant to process recycled water to Title 22 standards. The project would not increase capacity of the plant at this time. While the project would increase the capacity of certain components of the plant's treatment train (such as the interstage pumping stations upgrade of the propeller pumps to a capacity of 44 mgd), the plant would not be able to use this capacity until all the remaining components have been upgraded to an increased capacity. Future upgrades are outside the scope of this CEQA analysis and would require a separate, subsequent CEQA review for such a future project. It is also speculative at this time to determine what a future upgrade would include. In addition, the plant is not served by any other wastewater treatment facility. Therefore, the project would not result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. No impact would occur, and this issue will not be discussed in the EIR.

f. **Less-Than-Significant-Impact.** The project would require recycling to the maximum extent feasible in support of AB 939. The project would not result in an increase in employees and is not expected to generate a significant amount of construction-related waste that would exceed the capacity of local landfills. Nonhazardous construction refuse and solid waste would either be collected and recycled or disposed of at a local landfill, while any hazardous waste generated during proposed project construction would be disposed of at an appropriate location. Construction-related solid waste impacts are less than significant. Construction-related solid waste disposal will not be discussed in the EIR.

Because the upgraded WCP would be providing a higher level of treatment than the existing facility (tertiary rather than secondary), the quantity of sludge (biosolids) produced by the plant will increase approximately 5% from the existing condition. Like the current operations, sludge would be hauled away by a licensed hauler as needed. Solid waste that results from screening at the headworks is hauled off by the local refuse collector and is then disposed of by land application where the biosolids are used as a soils amendment (Marks *pers. comm.*). The project would increase the amount hauled away from the headworks by 5% in comparison to the existing condition. However, the biosolids hauler has capacity to haul away this additional sludge (Marks *pers. comm.*). Therefore, the project would not require the use of a landfill for the disposal of biosolids and the biosolids hauler has sufficient capacity to accommodate the project's additional solid waste disposal needs. Operational solid waste impacts would be less than significant and will not be discussed in the EIR.

g. **No Impact.** The project would generate some solid waste during construction and some during operation of the project. However, few residual materials are expected to be generated during construction, and there would be no net increase in the number of employees on site after construction and operation of the proposed administration building and other facility upgrades. Also, the project would comply with AB 939, which requires the County to attain specific waste diversion goals.

Biosolids disposal is regulated under Environmental Protection Agency Sewage Sludge Regulations (40 CFR 503). These regulations establish standards for pollutant limits; operational standards; management practices; and monitoring, record keeping, and reporting requirements. Since biosolids from the City are sent to an offsite facility, they are required to comply with 40 CFR 503. Additionally, the current hauler would also need to be, and is, permitted to handle biosolids per CVRWQCB requirements. The plant is currently in compliance with 40 CFR 503 regulations and would continue to be within compliance after the expansion. In addition, there are WDR specifications for proper treatment and disposal of biosolids. The SWRCB adopted general WDRs for the land application of biosolids (WDR Order No. 2004-0012-DWQ [General Order]). The existing wastewater treatment plant complies with this General Order related to land application of biosolids, as would the proposed project.

Because it is expected that little waste would be created beyond existing conditions and the project would comply with federal, state, and local statutes and regulations related to solid waste, there would be no impact, and further discussion is not required in the EIR.

XVIII. Mandatory Findings of Significance	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a. Does the project 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, substantially 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?	☒	☐	☐	☐
b. Does the project have impacts that are 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.)	☒	☐	☐	☐
c. Does the project have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

a. **Potentially Significant Impact.** The proposed project has 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, substantially 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. The Biological Resources section of the EIR would discuss specific project impacts on plants and wildlife, including avian species. The section also would evaluate the project's contribution to cumulative biological resources impacts and, where deemed necessary, would propose mitigation that would reduce any cumulative impacts. The cultural resources section of the EIR also would discuss the potential for the project to eliminate important examples of major periods in California history and prehistory.

b. **Potentially Significant Impact.** The project has the potential to contribute to cumulatively considerable impacts on aesthetics, agriculture and forestry, air quality (construction only), biological resources, cultural resources, geology/soils, greenhouse gas emissions, noise, population and housing, transportation and traffic, and utilities/service systems. The EIR would evaluate the project's contribution to cumulative impacts in these areas and any other identified areas as a part of the environmental review process.

c. **Potentially Significant Impact.** Although there may be air quality and noise impacts during construction, positive effects from long-term operation of the proposed wastewater recycling include increased groundwater recharge and water conservation of potable water that would be

used to support the local water supply. The long-term impacts of recycling wastewater would be discussed further in the EIR.

Citations and References

City of Visalia. 1991. Visalia General Plan Land Use Element. Revised June 1996. Available: <http://www.ci.visalia.ca.us/civica/filebank/blobdload.asp?BlobID=3406#page=>. Accessed: July 23, 2010.

County of Tulare. 2001. County of Tulare General Plan Policy Summary, Section 1 – Land use and Urban Boundaries. Prepared by Quad Knopf for the County of Tulare, Visalia, CA. Available: <http://www.co.tulare.ca.us/government/rma/planning/general_plan.asp>. Accessed: July 23, 2010.

Carollo Engineers. 2008. Draft Visalia Water Conservation Plant 2008 Master Plan – Executive Summary. Prepared for the City of Visalia, Visalia, CA.

CVRWQCB. 2002. Water Quality Control Plan for the Tulare Lake Basin. Second Addition. Available: <http://www.swrcb.ca.gov/rwqcb5/water_issues/basin_plans/newpages200401.pdf >. Accessed: July 23, 2010.

California Department of Conservation. 2008. *Rural Land Mapping Edition, Tulare County Important Farmland 2008, Sheet 1 of 2.* Available: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2008/tul08_no.pdf>. Accessed: April 30, 2010.

California Department of Transportation. 2010. *California Scenic Highway Mapping System, Tulare County.* Available: <http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm>. Accessed: April 30, 2010.

City of Visalia. 1989. *Visalia General Plan: Conservation, Open Space, Recreation and Parks Element.* Available: <http://www.ci.visalia.ca.us/civica/filebank/blobdload.asp?BlobID=4517#page=>. Accessed: June 13, 2010.

City of Visalia. 2009. *Composite FEMA Flood Insurance Rate Map To Be Effective June 19, 2009.* Available: <http://www.ci.visalia.ca.us/civica/filebank/blobdload.asp?BlobID=6869>. Accessed: June 14, 2010.

City of Visalia. 2010. *City of Visalia Interactive Map.* Available: <http://204.155.47.66:8080/webbase/>. Accessed: April 30, 2010.

City of Visalia. 2010a. *Visalia Fire Department Information.* Available: <http://www.ci.visalia.ca.us/depts/fire/info/default.asp>. Accessed: May 19, 2010.

City of Visalia. 2010b. *Beats, Reporting Districts, Service Sectors & Supervisor Areas.* Available: <http://www.ci.visalia.ca.us/depts/community_development/gis/standard_maps.asp >. Accessed: May 19, 2010.

County of Tulare. 1975. *Safety Element: An Element of the Tulare County General Plan.* Available: <http://www.ci.visalia.ca.us/civica/filebank/blobdload.asp?BlobID=3410#page=>. Accessed: June 16, 2010.

Huth, Norman. 1939. *The Visalia Plant* as found in Sewage Works Journal, Vol. 11, No. 4 (Jul., 1939), pp. 677-679.

Parsons Water & Infrastructure. 2010. *City of Visalia Preliminary Design Report for Water Conservation Plant Upgrades.* Prepared for the City of Visalia, Visalia, CA.

Provost & Pritchard Consulting Group. 2010. *Preliminary Design Concepts and Approach for Completion of Offsite Pipeline Design for the Water Conservation Plant Upgrade Project.* Prepared for Parsons Water & Infrastructure, Inc., Pasadena, CA.

U.S. Fish & Wildlife Service. 2010. *Wetlands Online Mapper.* Available: <http://www.fws.gov/wetlands/Data/Mapper.html>. Accessed: May 3, 2010.

U.S. Geological Survey. 2010. *Mineral Resource Data System: Conterminous US.* Available: <http://mrdata.usgs.gov/mineral-resources/mrds-us.html>. Accessed: June 15, 2010.

Department of Toxic Substances Control. 2010. *EnviroStor.* Available: <http://www.envirostor.dtsc.ca.gov/public/>. Accessed: May 13, 2010.

SWRCB (State Water Resources Control Board). 2010. *GeoTracker.* Last revised: 2008. Available: <http://geotracker.swrcb.ca.gov/map/?CMD=runreport&myaddress=vista%2C+ca>. Accessed: May 13, 2010.

Personal Communications

Marks, Chris. Environmental Manager, Terra Renewal Company. August 11, 2010—telephone conversation.

List of Preparers

City of Visalia

James Ross, City of Visalia Wastewater Treatment Plant Manager

ICF International

Chad Beckstrom, AICP, Project Director and Quality Assurance/Quality Control Manager
Steve Esselman, Project Manager, Lead Author
Aaron Brownwood, Contributing Author