



INITIAL STUDY / NOTICE OF PREPARATION

FOR THE

CITY OF LATHROP INTEGRATED WATER RESOURCES MASTER PLAN

FEBRUARY 2019

Prepared for:

City of Lathrop
Public Works Department
390 Towne Centre Drive
Lathrop, CA 95330

Prepared by:

De Novo Planning Group
1020 Suncoast Lane, Suite 106
El Dorado Hills, CA 95762
(916) 949-3231

D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm



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Notice of Preparation of an Environmental Impact Report and Scoping Meeting

Date: February 20, 2019

Subject: Notice of Preparation of an Environmental Impact Report and Scoping Meeting for the City of Lathrop Integrated Water Resources Master Plan

To: State Clearinghouse
State Responsible Agencies
State Trustee Agencies
Other Public Agencies
Organizations and Interested Persons

Lead Agency: City of Lathrop
Public Works Department
390 Towne Centre Drive
Lathrop, CA 95330

Project Planner: Greg Gibson, Senior Civil Engineer
ggibson@ci.lathrop.ca.us
(209) 941-7442

Notice of Preparation: This is to notify public agencies and the general public that the City of Lathrop, as the Lead Agency, will prepare an EIR for the City of Lathrop Integrated Water Resources Master Plan. The City of Lathrop is interested in the input and/or comments of public agencies and the public as to the scope and content of the environmental information that is germane to the agencies' statutory responsibilities in connection with the proposed project, and public input. Responsible/trustee agencies will need to use the EIR prepared by the City of Lathrop when considering applicable permits, or other approvals for the proposed project.

Comment Period: Consistent with the time limits mandated by State law, your input, comments or responses must be received in writing and sent at the earliest possible date, but not later than 5:00 PM, March 21, 2019.

Comments/Input: Please send your comments/input (including the name for a contact person in your agency) to: Attn: Greg Gibson, Senior Civil Engineer, at the City of Lathrop, 390 Towne Centre Drive, Lathrop, CA 95330, or by e-mail at: ggibson@ci.lathrop.ca.us

Scoping Meeting: On March 13, 2019, the City of Lathrop will conduct a public scoping meeting to solicit input and comments from public agencies and the general public on the proposed project and scope of the Environmental Impact Report (EIR). This meeting will be held at the Lathrop City Hall, Council Chambers, from 2:00 PM to 3:00 PM.

This meeting will be an open house format and interested parties may drop in to review the proposed project exhibits and submit written comments at any time between 2:00 PM to 3:00 PM. Representatives from the City of Lathrop and the EIR consultant will be available to address questions regarding the EIR process and scope. Members of the public may provide written comments throughout the meeting.

If you have any questions regarding the scoping meeting, contact Greg Gibson, Senior Civil Engineer, at (209) 941-7442 or ggibson@ci.lathrop.ca.us.

Project Title: City of Lathrop Integrated Water Resources Master Plan

1. Project Location and Setting

The Lathrop Integrated Water Resources Master Plan (IWRMP) project site (project site) is located throughout Lathrop, California. The IWRMP includes the improvement projects summarized in the proposed Water System Master Plan, Wastewater System Master Plan, and Recycled Water System Master Plan.

The City of Lathrop is located in San Joaquin County, approximately 10 miles south of the City of Stockton and directly west of the City of Manteca. The City lies east of the Coastal Range that separates California's Central Valley from the San Francisco Bay Area. Interstate 5 (I-5), a major north-south interstate corridor, bisects the City. The City is also connected by State Route (SR) 120 which runs east-west through the southeastern-most part of the City, and by Interstate 205, which connects Interstate 580 to I-5. The City is also served by the Altamont Commuter Express (ACE) train, which travels along the southern and eastern border of the City. The community was originally developed primarily east of I-5. However, most major new developments have recently been constructed west of I-5 and others are currently planned or under construction in this area.

The City is relatively flat with natural gentle slope from east to west. The City's topography has an average elevation of approximately 20 feet above sea level.

The City's water service area is generally contiguous with the City limits and includes the railroad cargo container commercial enterprise that is outside of the City limits. The City's wastewater collection system service area is generally contiguous with the City limits. The City's recycled water distribution system is generally contiguous with the City limits and includes some facilities north of the City limits.

2. Project Background

For the past year, the City has been working to prepare a comprehensive update to the City's water, sewer and recycled water master plan documents in order to support growth in the City while maintaining safe, reliable utility services for existing users. Collectively, these documents are referred to as the City's IWRMP.

A comprehensive update to the City's water, sewer and recycled water master plan documents was needed to forecast and update water and sewer demand projections, address changes in regulatory requirements, population and growth projections, proposed land use, climate change and other factors. The last comprehensive update of the City's water, sewer and recycled master plans were prepared in 2001 and they have been amended numerous times. A Water Supply

Study was prepared and adopted by the City in 2009 to serve as the basis for future water planning documents. A draft Water Master Plan was prepared for the City in 2013, but was never finalized and adopted. Over the course of time, numerous amendments to the master plans and changes have occurred that necessitate a comprehensive update to these documents.

The IWRMP has identified significant changes from previously approved master plan documents. Some of these changes include:

- Changes in demand factors for water, sewer and associated recycled water storage and disposal capacity.
- Changes in land use and growth projections from the General Plan.
- Closure of the Sharpe Army Depot and need for City to provide water and sewer service to the Army & Air Force Exchange Services (AAFES) and other organizations at the military base.
- Potential reductions to the City's water supply due to Sustainable Groundwater Management Act implementation, and curtailment of South San Joaquin Irrigation District surface water rights.
- Consolidation of existing proposed wastewater treatment facilities into a single facility and associated recycled water system used for land disposal of effluent.
- Need for additional treatment of groundwater for arsenic, manganese, uranium and other constituents of concern.

3. Project Description

The proposed project includes adoption and implementation of the IWRMP, which includes the improvement projects summarized in the proposed Water System Master Plan, Wastewater System Master Plan, and Recycled Water System Master Plan. Each of these Plans is discussed in detail below.

A. WATER SYSTEM MASTER PLAN

The Water System Master Plan focuses on development of water demand unit factors and projections, hydraulic assessment of the City's existing water infrastructure and key planned improvements, and development of recommended water system capital improvement projects (CIPs). Recommended CIPs were developed to support the City's water supply strategy and address the deficiencies identified in the hydraulic assessment. A project was developed to address each identified fire flow capacity deficiency, either by replacing existing mains, installing new mains, or replacing undersized hydrants. Additional projects were developed to improve transmission of supply sources within the City's distribution system.

Table 1 in the Initial Study summarizes all the identified capacity improvement projects and their estimated planning level opinion of probable costs (OPCs).

B. WASTEWATER SYSTEM MASTER PLAN

The Wastewater System Master Plan focuses on development of wastewater flow unit factors and projections, hydraulic assessment of the City's existing infrastructure and key planned conveyances, and development of recommended wastewater CIPs.

Recommended CIPs were developed to address the potential deficiencies identified in the hydraulic assessment. For each identified gravity sewer capacity deficiency, a project was developed to remove and replace the existing pipe with a larger diameter pipe. Existing pipe slopes and depths were preserved when upsizing sewers in-place. Proposed increases in pipe diameters were optimized to meet the applicable criteria, while preventing oversizing and resulting low velocities during dry weather conditions. Improvements were also identified to address the potential deficiency at the City's pump stations, including construction of parallel force mains and/or pump upgrades. EKI has also suggested installation of permanent flow meter and flow monitoring programs in the Historic Lathrop and Crossroads areas.

Table 2 in the Initial Study summarizes all the identified collection system improvement projects, including location, proposed improvements, estimated planning level costs, and alternatives.

C. RECYCLED WATER SYSTEM MASTER PLAN

The Recycled Water System Master Plan focuses on an evaluation of recycled water use and disposal alternatives, recycled water balance analyses, hydraulic assessment of the City's existing recycled infrastructure and key planned improvements, and development of recommended recycled water system improvements and operational recommendations.

The City's recycled water system supports the disposal of the effluent produced by the City-owned Lathrop Consolidated Treatment Facility (CTF). When the draft of the Recycled Water System Master Plan was published in March 2018, the recycled water system had a disposal capacity of 1.0 million gallons per day (MGD) and included seven agricultural land application areas (LAAs; A23, A28, A30, A31, A35, A35b, and A35c), nine storage ponds (S1, S2, S3, S5, S6, S16, A, B, and C), their associated pump stations (PMP1, PMP2, PMP3, PMP10, and the Crossroads PMP), and approximately 30.3 miles of recycled water pipeline. This infrastructure supported the recent Phase 1 expansion of the Lathrop CTF and is referred to as "existing" or "Phase 1" infrastructure herein.

The City is currently expanding its recycled water distribution system to meet disposal requirements for the Phase 2 expansion of the Lathrop CTF, which will increase the Lathrop CTF treatment capacity and disposal capacity to 2.5 MGD. For purposes of this evaluation, it was assumed that the Phase 2 recycled water system expansion would be completed in two phases: Phases 2A and 2B. Phase 2A improvements were based on the planned initial infrastructure improvements as of October 2017, which were planned to provide a disposal capacity of 1.9 MGD. Phase 2B facilities would expand the disposal capacity to the full 2.5 MGD CTF Phase 2 treatment capacity.

Planned Phase 2A improvements included an expansion of the recycled water distribution network and the addition of a new lined recycled water storage pond (S28), a new percolation pond (PB-1), two new agricultural LAAs (A34 and A36), and a new pump station (RI-PS) that supplies recycled water to a private distribution system serving landscape irrigation use areas in the River Islands development area.

During 2017 and 2018, the Phase 2A improvements were implemented, with the exception that LAA A34 was not constructed. This resulted in an interim disposal capacity of approximately 1.55 MGD. In late 2018, LAA A34 was constructed, but as of December 2018, the permitting has not yet been performed to increase the disposal capacity to approximately 1.9 MGD.

In late 2018, there were some developments that may affect the phasing of the recycled water capacity as well as the configuration of Phase 2B. These developments include the possible removal or replacement of selected storage ponds and/or LAAs. These removals and/or replacements were not anticipated at the time of the original drafting of the Recycled Water System Master Plan and are therefore not considered in the analysis included in the Master Plan.

The hydraulic assessment of the distribution system indicated that the distribution system pipelines are adequately sized to meet performance criteria through Phase 2B. The Recycled Water System Master Plan identified the following improvements that should be implemented during the Phase 2A expansion, in addition to those currently under construction:

- Conversion of the low-pressure PMP-10 to a high-pressure pump station should be completed as soon as possible to be able to effectively convey recycled water from S16. This improvement is anticipated to be funded by developers.
- Installation of flow meters and automatic control valves with radio telemetry at each LAA turnout location to facilitate automated delivery of recycled water to the LAAs. Costs for these improvements were estimated to be \$480,000, not inclusive of estimated contingencies (PACE, 2018).
- Establish Supervisory Control and Data Acquisition (SCADA) controls on pump and storage ponds to automate system operations. Costs have not been estimated for these operational improvements.

For expansion of permitted recycled water uses in Phase 2B, the Recycled Water System Master Plan recommends the following improvements, in addition to those already planned:

- Increase the capacity of PMP-1 in conjunction with the installation of Pond S-X (located directly north of S5). This improvement is anticipated to be funded by developers.
- Install a new pond and pump station in the western portion of the City, potentially at locations S13 and PMP6, to meet storage requirements and to meet system pressure criteria in Phase 2B. This improvement is anticipated to be funded by developers.

Alternative uses of recycled water were evaluated in Phase 2B and beyond, including increased percolation and winter river discharge. These alternatives have the potential to provide increased water supply benefits and reduce the areas required for recycled water storage and disposal. The Recycled Water System Master Plan recommends that the City initiate a percolation study to assess locations in the City which have suitable soils for a percolation. The Plan also recommends that the City initiate discussion with the Regional Water Quality Control Board (RWQCB) to better assess the potential for a river discharge permit.

D. SCADA TOWERS AND GENERATORS

Generators would be provided in conjunction with the proposed water pump station improvements shown in Table 1 of the Initial Study. The generators will be added as the new essential facilities are constructed and brought on-line, such as the CLSP water tank, River Islands water tank/SSJID turnout, and sewer pump stations (see Table 2 of the Initial Study). The generators would all be for emergency operations in the event of a power outage, and would only be run for maintenance and air quality permit testing requirements.

The generators would typically be enclosed within a building or semi-enclosed within a masonry wall enclosure in order to help attenuate noise. The type of enclosure would depend on the location. For example, generators near residential areas would be semi-enclosed or enclosed within a building, and generators in non-residential may not be enclosed.

Additionally, SCADA communication towers would also be provided. Currently, SCADA towers are located at the City of Lathrop Corporation Yard (2112 E. Louise Avenue), the City of Lathrop City Hall (390 Town Centre Drive), the Lathrop Consolidated Treatment Facility (LCTF) (18800 Christopher Way), and at a few other locations in the River Islands and CLSP development areas. The proposed SCADA towers are required in order to provide a line-of-sight for radio communications between the facilities. The towers would be 50- to 100-feet in height, or taller.

4. Uses of the EIR and Required Agency Approvals

A more detailed description of the required agency approvals is provided in the Initial Study.

5. Project Alternatives

The exact alternatives that will be evaluated in the Draft EIR will be determined through the Notice of Preparation and Scoping Process.

Areas of Potential Impacts: With the exception of the environmental topics dismissed in the Initial Study (see below), the EIR will analyze all other topics identified in Appendix G of the State CEQA Guidelines: Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Tribal Cultural Resources, Utilities, Cumulative Impacts, and Growth Inducing Impacts.

Initial Study: An Initial Study has been prepared for this Project. All environmental topics identified in Appendix G of the State CEQA Guidelines were analyzed in the Initial Study. The Initial Study concluded that the proposed Project would have no impacts or less-than-significant impacts related to: Aesthetics, Agriculture and Forestry Resources, Air Quality, Energy, Greenhouse Gases, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, and Wildfire.

Date: 2/4/19

Signature: 

Name/Title: Greg Gibson, Senior Civil Engineer

Phone/Email: (206) 941-7442 / ggibson@ci.lathrop.ca.us

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INITIAL STUDY CHECKLIST

PROJECT TITLE

Lathrop Integrated Water Resources Master Plan

LEAD AGENCY NAME AND ADDRESS

City of Lathrop
Public Works Department
390 Towne Centre Drive
Lathrop, CA 95330

CONTACT PERSON AND PHONE NUMBER

Greg Gibson, Senior Civil Engineer
City of Lathrop
Public Works Department
390 Towne Centre Drive
Lathrop, CA 95330
ggibson@ci.lathrop.ca.us
(209) 941-7442

PROJECT LOCATION AND SETTING

The Lathrop Integrated Water Resources Master Plan (IWRMP) project site (project site) is located throughout Lathrop, California. See Figures 1 and 2 for the regional location and the project vicinity. The IWRMP includes the improvement projects summarized in the proposed Water System Master Plan, Wastewater System Master Plan, and Recycled Water System Master Plan.

The City of Lathrop is located in San Joaquin County, approximately 10 miles south of the City of Stockton and directly west of the City of Manteca. The City lies east of the Coastal Range that separates California's Central Valley from the San Francisco Bay Area. Interstate 5 (I-5), a major north-south interstate corridor, bisects the City. The City is also connected by State Route (SR) 120 which runs east-west through the southeastern-most part of the City, and by Interstate 205, which connects Interstate 580 to I-5. The City is also served by the Altamont Commuter Express (ACE) train, which travels along the southern and eastern border of the City. The community was originally developed primarily east of I-5. However, most major new developments have recently been constructed west of I-5 and others are currently planned or under construction in this area.

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The City's water service area is generally contiguous with the City limits and includes the railroad cargo container commercial enterprise that is outside of the City limits. The City's wastewater collection system service area is generally contiguous with the City limits. The City's existing recycled water distribution system is generally contiguous with the City limits and includes some facilities north of the City limits. See Figure 3 for the water system improvements projects included in the proposed Water System Master Plan, Figure 4 for the wastewater system improvements projects included in the proposed Wastewater System Master Plan, and Figures 5, 6, and 7 for the Phase 1, Phase 2A, and Phase 2B recycled water system infrastructure projects included in the proposed Recycled Water System Master Plan, respectively.

PROJECT BACKGROUND

For the past year, the City has been working to prepare a comprehensive update to the City's water, sewer and recycled water master plan documents in order to support growth in the City while maintaining safe, reliable utility services for existing users. Collectively, these documents are referred to as the City's IWRMP.

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PROJECT DESCRIPTION

The proposed project includes adoption and implementation of the IWRMP, which includes the improvement projects summarized in the proposed Water System Master Plan, Wastewater System Master Plan, and Recycled Water System Master Plan. Each of these Plans is discussed in detail below.

Water System Master Plan

The Water System Master Plan focuses on development of water demand unit factors and projections, hydraulic assessment of the City's existing water infrastructure and key planned improvements, and development of recommended water system capital improvement projects (CIPs). Recommended CIPs were developed to support the City's water supply strategy and address the deficiencies identified in the hydraulic assessment. A project was developed to address each identified fire flow capacity deficiency, either by replacing existing mains, installing new mains, or replacing undersized hydrants. Additional projects were developed to improve transmission of supply sources within the City's distribution system.

Table 1 summarizes all the identified capacity improvement projects and their estimated planning level opinion of probable costs (OPCs).

Table 1: Summary of Recommended Water System Capital Improvement Projects

Project #	Project	Time Frame ¹	Addresses Fire Flow Deficiency	Total Project OPC ^{2,3}
Water Supply Improvements				
WS-1	SGMA Compliance ⁴	Existing	--	\$300,000
WS-2	SSJID Turnout Emergency Backup Power ⁵	Near-Term	--	\$770,000
WS-3	Well 21 WTF Phase 2 Improvements ⁶	Near-Term	--	\$1,300,000
WS-4	Well 21 WTF Tank, BPS, and Transmission Main ⁷	Near-Term	--	\$5,520,000
WS-5	SCWSP Phase 2	Near-Term	--	\$23,200,000
WS-6	SSJID Turnout 2 Expansion ⁵	Long-term	--	\$3,680,000
<i>Total Water Supply Improvements OPC</i>				<i>\$34,770,000</i>
Water Distribution System Improvements				
WD-1	Booster Pump Station 1 Pipeline Replacement and Residential Fire Flow Improvement Project	Existing	Yes	\$1,200,000
WD-2	Booster Pump Station 3 Pipeline Replacement and Harlan Rd. Fire Flow Improvement Project	Existing ⁸	Yes	\$1,510,000
WD-3	Northern McKinley Industrial Area Fire Flow Improvement Project	Existing	Yes	\$1,290,000
WD-4	Old Harlan Fire Flow Improvement Project	Existing	Yes	\$110,000
WD-5	Crossroads Fire Flow Improvement Project	Existing	Yes	\$50,000
WD-6	McKinley Ave. and E. Louise Ave. Fire Flow Improvement Project	Existing	Yes	\$80,000
WD-7	Booster Pump Station 2 Pipeline Replacement Project	Existing	No	\$230,000
WD-8	LAWTF Transmission Improvement Project	Existing ⁹	No	\$2,890,000
WD-9	Sadler Oak Transmission Improvement Project	Near-Term ¹⁰	No	\$360,000
WD-10	SSJID Transmission Improvement Project	Long-Term ¹¹	No	\$1,630,000
<i>Total Water Distribution System Improvements OPC</i>				<i>9,350,000</i>
Total Water Distribution Supply and System Improvements OPC				44,120,000

NOTES: ¹ TIME FRAME REFERS TO WHEN PROJECTS ARE IDENTIFIED TO BE REQUIRED.

² COSTS SHOWN ARE PRESENTED IN NOVEMBER 2018 DOLLARS BASED ON AN ENR CCI OF 11,183 (20-CITY AVERAGE), WITH TOTALS ROUNDED TO THE NEAREST \$10,000.

³ COSTS INCLUDE MARK-UPS EQUAL TO 60% FOR CONSTRUCTION CONTINGENCY (25%), DESIGN (10%), CONSTRUCTION MANAGEMENT (10%), PERMITTING (10%), AND PROJECT IMPLEMENTATION (5%).

⁴ THE CITY'S CURRENT BUDGET FOR SGMA COMPLIANCE HAS BEEN RETAINED HEREIN, BUT WILL BE REEVALUATED IN THE FUTURE TO ADDRESS THE FINAL RESULT OF THE BASIN BOUNDARY MODIFICATION REQUEST AND THE LEVEL OF EFFORT IDENTIFIED IN THE GSP FOR IMPLEMENTATION.

⁵ CONSTRUCTION COSTS FOR IMPROVEMENTS HAVE BEEN CARRIED OVER FROM ESTIMATES IN THE 2013 DRAFT WATER MASTER PLAN, ESCALATED TO NOVEMBER 2018 DOLLARS.

⁶ CONSTRUCTION COSTS FOR WELL 21 WTF PHASE 2 IMPROVEMENTS REFLECT THE CURRENT ENGINEER'S ESTIMATE PREPARED BY H2O URBAN SOLUTIONS IN JULY 2017, ESCALATED TO NOVEMBER 2018 DOLLARS. NOTE THAT THE RAW WATER LINE FROM MCKINLEY TO WELL 21 MAY BE CONSTRUCTED IN PHASE 1.

⁷ CONSTRUCTION COSTS FOR WELL 21 WTF TANK AND BPS REFLECT THE CURRENT ENGINEER'S ESTIMATE PREPARED BY H2O URBAN SOLUTIONS IN JULY 2017, ESCALATED TO NOVEMBER 2018 DOLLARS. TRANSMISSION LINE COST REFLECT THE IWRMP UNIT PIPELINE COSTS FOR UNDEVELOPED AREAS.

⁸ THE BPS-3 PIPELINE REPLACEMENT IS SIZED TO ADDRESS HEAD LOSS DEFICIENCIES INCREASED BY CENTRAL LATHROP SPECIFIC PLAN (CLSP) DEVELOPMENT.

⁹ THE LAWTF TRANSMISSION IMPROVEMENT PROJECT IMPROVES TRANSMISSION CAPABILITIES AND SUPPLY RESILIENCY BETWEEN THE LAWTF AND THE MOSSDALE, RIVER ISLANDS, AND CLSP DEVELOPMENT AREAS.

¹⁰ THE SADLER OAK TRANSMISSION IMPROVEMENT PROJECT TRANSMISSION CAPABILITIES AND SUPPLY RESILIENCY BETWEEN TANK 4 AND RIVER ISLANDS AND SOUTH LATHROP.

¹¹ THE SOUTH SAN JOAQUIN IRRIGATION DISTRICT (SSJID) TRANSMISSION IMPROVEMENT PROJECT TRANSMISSION CAPABILITIES AND SUPPLY RESILIENCY BETWEEN SSJID TURNOUT 1 AND CLSP AND ADDRESS HEAD LOSS DEFICIENCIES WHICH ARE WORSENERED BY INCREASED DEMAND CONDITIONS WEST OF I-5.

SOURCE: CITY OF LATHROP WATER SYSTEM MASTER PLAN, TABLE ES-2.

Wastewater System Master Plan

The Wastewater System Master Plan focuses on development of wastewater flow unit factors and projections, hydraulic assessment of the City's existing infrastructure and key planned conveyances, and development of recommended wastewater CIPs.

Recommended CIPs were developed to address the potential deficiencies identified in the hydraulic assessment. For each identified gravity sewer capacity deficiency, a project was developed to remove and replace the existing pipe with a larger diameter pipe. Existing pipe slopes and depths were preserved when upsizing sewers in-place. Proposed increases in pipe diameters were optimized to meet the applicable criteria, while preventing oversizing and resulting low velocities during dry weather conditions. Improvements were also identified to address the potential deficiency at the City's pump stations, including construction of parallel force mains and/or pump upgrades. EKI has also suggested installation of permanent flow meter and flow monitoring programs in the Historic Lathrop and Crossroads areas.

Table 2 summarizes all the identified collection system improvement projects, including location, proposed improvements, estimated planning level costs, and alternatives.

Table 2: Summary of Recommended Wastewater System Capital Improvement Projects

Project #	Project	Time Frame	Addresses Modeled Surcharging in Existing Scenario	Total Project OPC¹
Treatment Facility Improvement				
WWT-1	Lathrop CTP Expansion to 5.0 MGD	Existing	--	\$36,000,000 ³
Collection System Improvements				
WW-1	Stonebridge Gravity Main Replacement and Pump Station Upgrade	Existing	No	700,000
WW-2A	Woodfield West Deficiency Project - Alternative A	Existing ²	No	2,240,000
WW-2B	Woodfield West Deficiency Project - Alternative B	Existing ²	No	1,970,000
WW-3	Woodfield Pump Station Upgrade	Existing ²	No	720,000
WW-4	J St. Gravity Main Replacement Project	Existing ²	Yes	1,390,000
WW-5	Easy Ct. / O St. Gravity Main Replacement Project	Existing	No	1,130,000
WW-6	O St. Pump Station Upgrade	Existing	No	1,280,000
WW-7	Crossroads Gravity Main Replacement Project	Near-Term Future	No	1,690,000
<i>Collection System CIP Cost Subtotal</i>				\$8,880,000 to \$9,150,000
Miscellaneous Collection System Project				
WW-8	Temporary Flow Monitoring	--	--	\$100,000
Total CIP Cost				\$44,980,000 to \$45,250,000

NOTES: ¹ COSTS SHOWN ARE PRESENTED IN NOVEMBER 2018 DOLLARS BASED ON AN ENR CCI OF 11,184 (20-CITY AVERAGE).

² PROJECT ADDRESSES EXISTING DEFICIENCIES, HOWEVER FUTURE DEVELOPMENT INFLUENCES RECOMMENDED PIPE OR PUMP SIZES TO BE INSTALLED.

³ TOTAL PROJECT OPC CONSISTS OF CONSTRUCTION OPC DEVELOPED BASED ON A UNIT COST OF \$9 PER GALLON ADDITIONAL ADWF CAPACITY, 25% CONSTRUCTION CONTINGENCY, AND 35% ENGINEERING AND ADMINISTRATION COSTS.

SOURCE: CITY OF LATHROP WASTEWATER SYSTEM MASTER PLAN, TABLE ES-2.

Recycled Water System Master Plan

The Recycled Water System Master Plan focuses on an evaluation of recycled water use and disposal alternatives, recycled water balance analyses, hydraulic assessment of the City's existing

recycled infrastructure and key planned improvements, and development of recommended recycled water system improvements and operational recommendations.

The City's recycled water system supports the disposal of the effluent produced by the City-owned Lathrop Consolidated Treatment Facility (CTF). When the draft of the Recycled Water System Master Plan was published in March 2018, the recycled water system had a disposal capacity of 1.0 million gallons per day (MGD) and included seven agricultural land application areas (LAAs; A23, A28, A30, A31, A35, A35b, and A35c), nine storage ponds (S1, S2, S3, S5, S6, S16, A, B, and C), their associated pump stations (PMP1, PMP2, PMP3, PMP10, and the Crossroads PMP), and approximately 30.3 miles of recycled water pipeline. This infrastructure supported the recent Phase 1 expansion of the Lathrop CTF and is referred to as "existing" or "Phase 1" infrastructure herein.

The City is currently expanding its recycled water distribution system to meet disposal requirements for the Phase 2 expansion of the Lathrop CTF, which will increase the Lathrop CTF treatment capacity and disposal capacity to 2.5 MGD. For purposes of this evaluation, it was assumed that the Phase 2 recycled water system expansion would be completed in two phases: Phases 2A and 2B. Phase 2A improvements were based on the planned initial infrastructure improvements as of October 2017, which were planned to provide a disposal capacity of 1.9 MGD. Phase 2B facilities would expand the disposal capacity to the full 2.5 MGD CTF Phase 2 treatment capacity.

Planned Phase 2A improvements included an expansion of the recycled water distribution network and the addition of a new lined recycled water storage pond (S28), a new percolation pond (PB-1), two new agricultural LAAs (A34 and A36), and a new pump station (RI-PS) that supplies recycled water to a private distribution system serving landscape irrigation use areas in the River Islands development area.

During 2017 and 2018, the Phase 2A improvements were implemented, with the exception that LAA A34 was not constructed. This resulted in an interim disposal capacity of approximately 1.55 MGD. In late 2018, LAA A34 was constructed, but as of December 2018, the permitting has not yet been performed to increase the disposal capacity to approximately 1.9 MGD.

In late 2018, there were some developments that may affect the phasing of the recycled water capacity as well as the configuration of Phase 2B. These developments include the possible removal or replacement of selected storage ponds and/or LAAs. These removals and/or replacements were not anticipated at the time of the original drafting of the Recycled Water System Master Plan and are therefore not considered in the analysis included in the Master Plan.

The hydraulic assessment of the distribution system indicated that the distribution system pipelines are adequately sized to meet performance criteria through Phase 2B. The Recycled Water System Master Plan identified the following improvements that should be implemented during the Phase 2A expansion, in addition to those currently under construction:

- Conversion of the low-pressure PMP-10 to a high-pressure pump station should be completed as soon as possible to be able to effectively convey recycled water from S16. This improvement is anticipated to be funded by developers.
- Installation of flow meters and automatic control valves with radio telemetry at each LAA turnout location to facilitate automated delivery of recycled water to the LAAs. Costs for these improvements were estimated to be \$480,000, not inclusive of estimated contingencies (PACE, 2018).

- Establish Supervisory Control and Data Acquisition (SCADA) controls on pump and storage ponds to automate system operations. Costs have not been estimated for these operational improvements.

For expansion of permitted recycled water uses in Phase 2B, the Recycled Water System Master Plan recommends the following improvements, in addition to those already planned:

- Increase the capacity of PMP-1 in conjunction with the installation of Pond S-X (located directly north of S5). This improvement is anticipated to be funded by developers.
- Install a new pond and pump station in the western portion of the City, potentially at locations S13 and PMP6, to meet storage requirements and to meet system pressure criteria in Phase 2B. This improvement is anticipated to be funded by developers.

Alternative uses of recycled water were evaluated in Phase 2B and beyond, including increased percolation and winter river discharge. These alternatives have the potential to provide increased water supply benefits and reduce the areas required for recycled water storage and disposal. The Recycled Water System Master Plan recommends that the City initiate a percolation study to assess locations in the City which have suitable soils for a percolation. The Plan also recommends that the City initiate discussion with the Regional Water Quality Control Board (RWQCB) to better assess the potential for a river discharge permit.

SCADA Towers and Generators

Generators would be provided in conjunction with the proposed water pump station improvements shown above in Table 1. The generators will be added as the new essential facilities are constructed and brought on-line, such as the CLSP water tank, River Islands water tank/SSJID turnout, and sewer pump stations (see Table 2 above). The generators would all be for emergency operations in the event of a power outage, and would only be run for maintenance and air quality permit testing requirements.

The generators would typically be enclosed within a building or semi-enclosed within a masonry wall enclosure in order to help attenuate noise. The type of enclosure would depend on the location. For example, generators near residential areas would be semi-enclosed or enclosed within a building, and generators in non-residential may not be enclosed.

Additionally, SCADA communication towers would also be provided. Currently, SCADA towers are located at the City of Lathrop Corporation Yard (2112 E. Louise Avenue), the City of Lathrop City Hall (390 Town Centre Drive), the Lathrop Consolidated Treatment Facility (LCTF) (18800 Christopher Way), and at a few other locations in the River Islands and CLSP development areas. The proposed SCADA towers are required in order to provide a line-of-sight for radio communications between the facilities. The towers would be 50- to 100-feet in height, or taller.

REQUESTED ENTITLEMENTS AND OTHER APPROVALS

The City of Lathrop is the Lead Agency for the proposed project, pursuant to the State Guidelines for Implementation of CEQA, Section 15050.

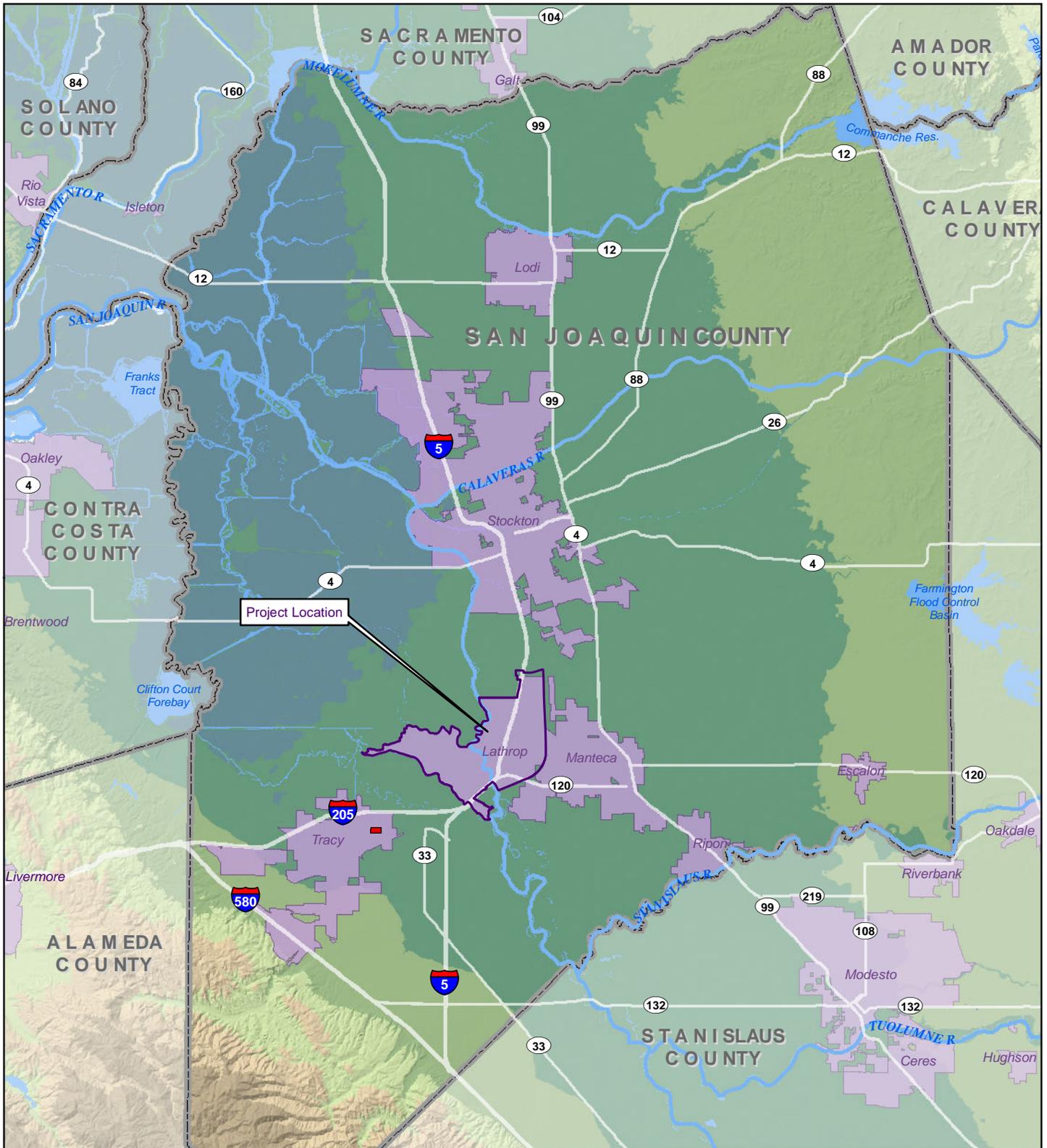
This document will be used by the City of Lathrop to take the following actions:

- Certification of the EIR;
- Adoption of the Mitigation Monitoring and Reporting Program;
- City review and approval of the Water System Master Plan, Wastewater System Master Plan, and Recycled Water System Master Plan.

The following agencies may be required to issue permits or approve certain aspects of the proposed project:

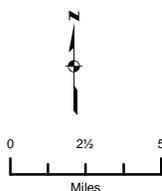
- RWQCB – Construction activities would be required to be covered under the National Pollution Discharge Elimination System (NPDES);
- RWQCB – The Storm Water Pollution Prevention Plan (SWPPP) would be required to be approved prior to construction activities pursuant to the Clean Water Act;
- San Joaquin Valley Air Pollution Control District (SJVAPCD) – Approval of construction-related air quality permits;
- San Joaquin Council of Governments (SJCOG) – Review of project application to determine consistency with the San Joaquin County Multi-Species Habitat, Conservation, and Open Space Plan (SJMSCP).

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Legend

- City Area
- County Boundary



LATHROP INTEGRATED WATER RESOURCES MASTER PLAN

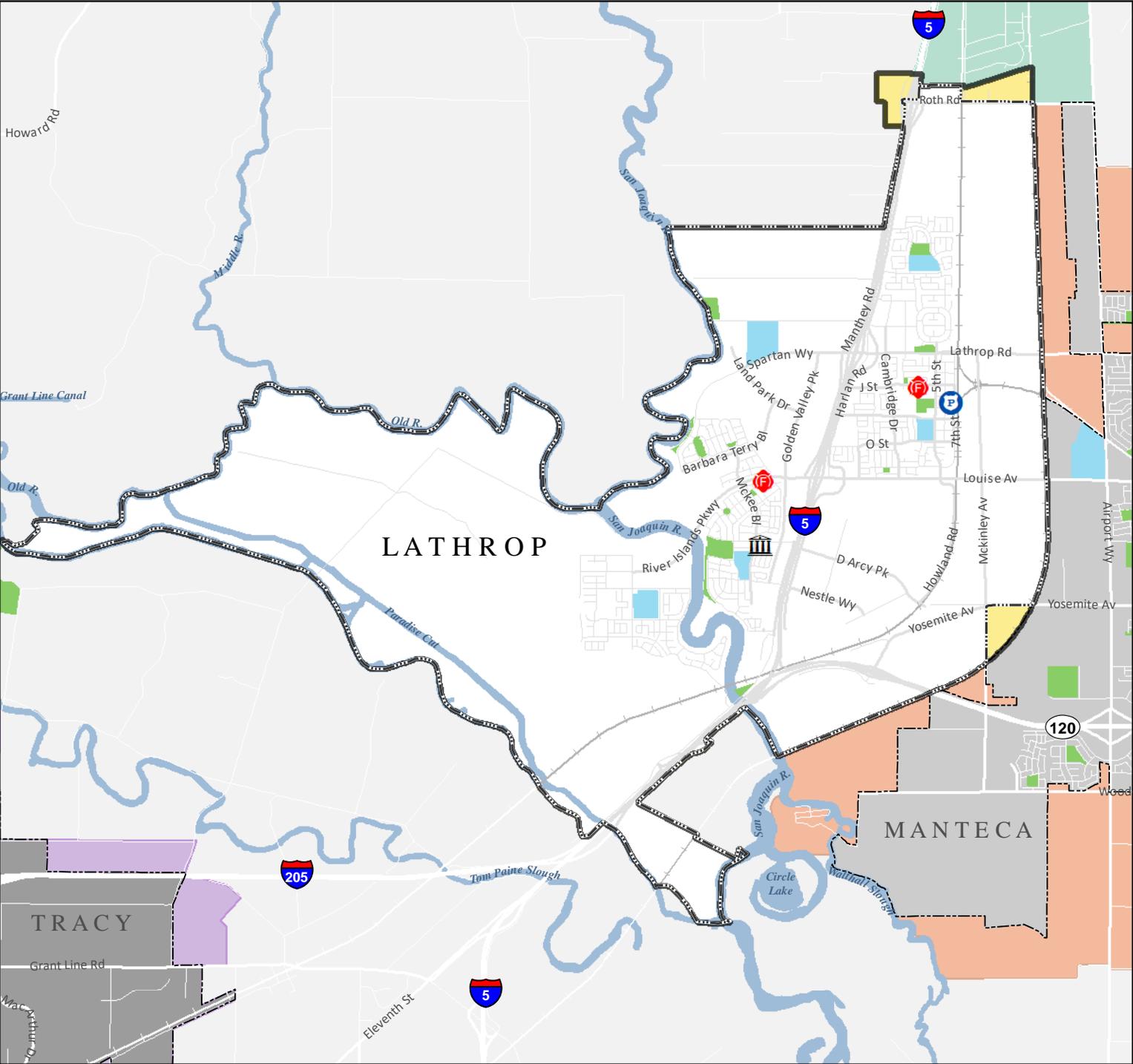
Figure 1. Regional Location Map

Sources: CalAtlas; Sacramento County, San Joaquin County, Solano County, Contra Costa County, Alameda County, Stanislaus County. Map date: January 27, 2019

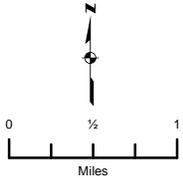
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**LATHROP
INTEGRATED WATER RESOURCES
MASTER PLAN**

Figure 2. Vicinity Map



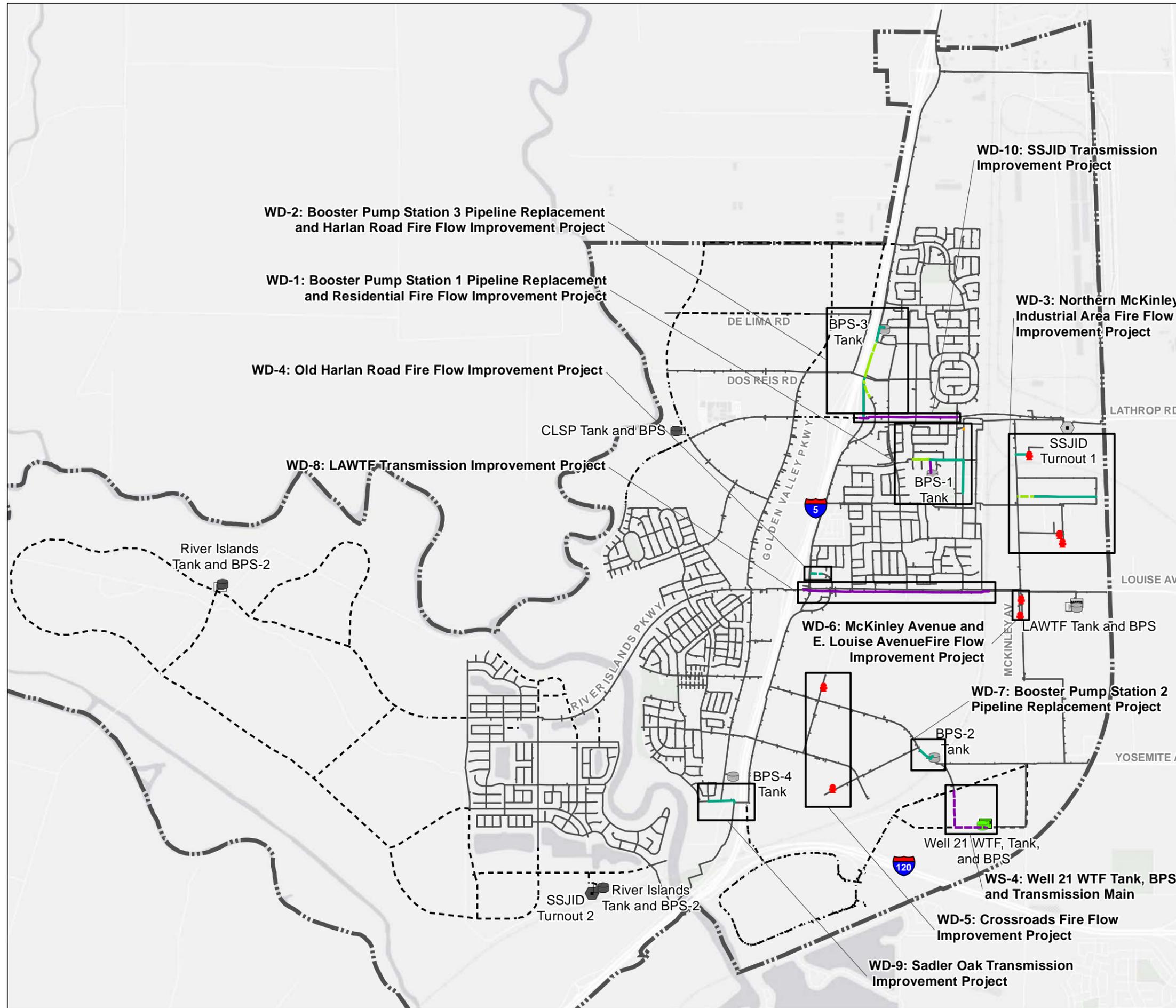
- Legend**
- Project Boundary
 - City Limits**
 - Lathrop
 - Manteca
 - Tracy
 - Spheres Of Influence**
 - Lathrop
 - Manteca
 - Tracy
 - Stockton
 - Places of Interest**
 - City Hall
 - Fire Station
 - Police Department
 - Public Park
 - Public School



Sources: San Joaquin County; Google Maps. Map date: January 27, 2019.

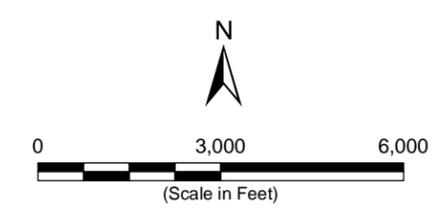
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Figure 3.
Water System Improvement Projects



Legend

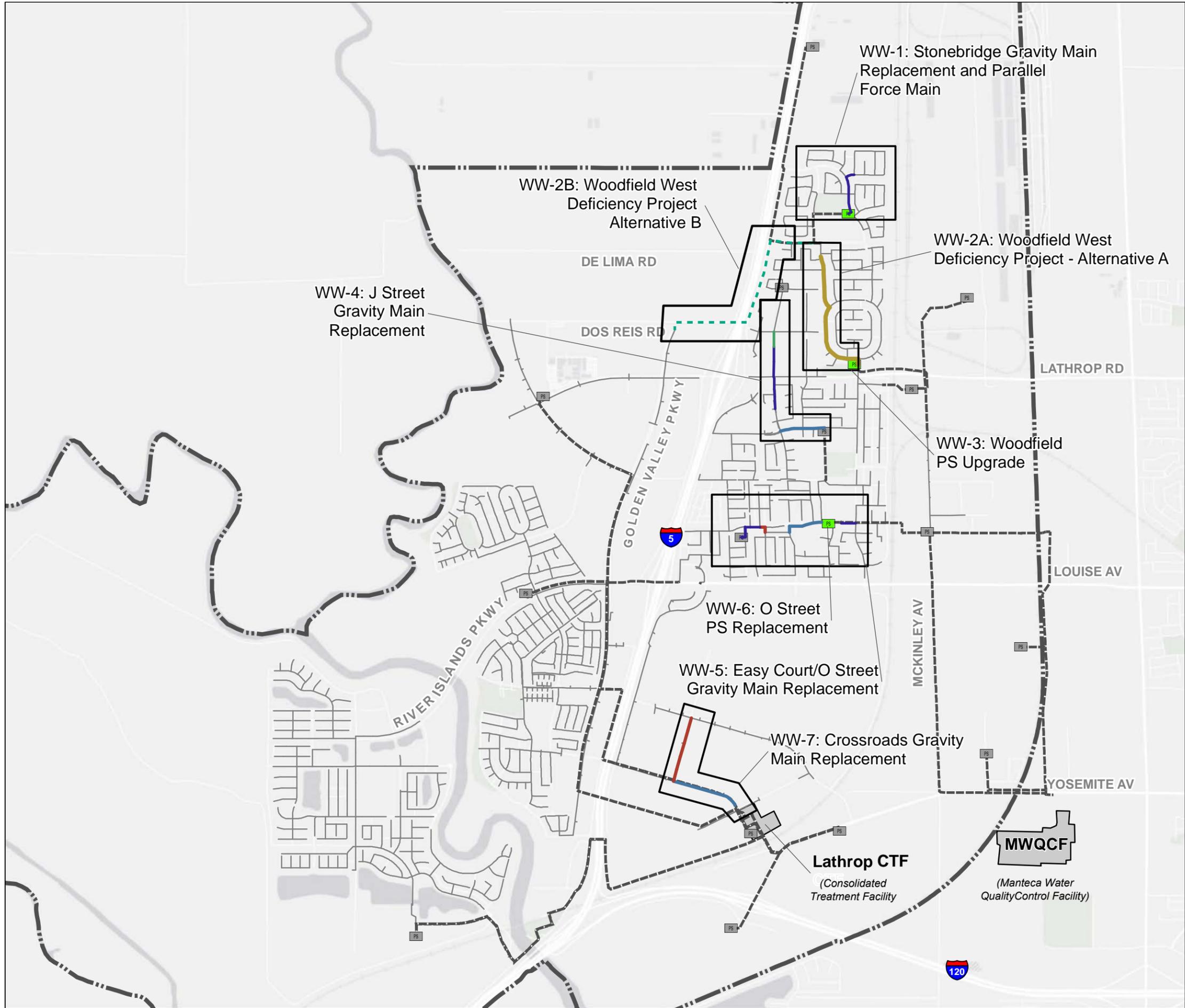
- Sphere of Influence
- Existing Infrastructure**
 - Treatment Plant
 - Pump Station
 - Enclosed Storage Facility
 - SSJID Turnout
 - Existing Pipe
- Future Infrastructure**
 - Future Pump Station
 - Future Enclosed Storage Facility
 - Future SSJID Turnout
 - Future Pipe
- Recommended CIPS**
 - Replace existing hydrant with 8-inch hydrant & lateral
 - Future Pump Station
 - Future Enclosed Storage Facility
 - Future SSJID Turnout
- Replacement Pipe, inches**
 - 6
 - 8
 - 12
 - 16
- New Pipe, inches**
 - 6
 - 8
 - 12
 - 16



Source: eki environment & water, Recommended Water System Improvement Projects, December 2018. Map date: January 28, 2019.

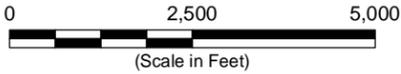
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Figure 4.
Wastewater System Improvement
Projects



Legend

- Sphere of Influence
- Approximate Area of WWTF
- Pump Station or Lift Station
- Pump Station or Lift Station Upgrade
- Force Main
- Gravity Main
- Diameter of Replacement Sewer**
- 8"
- 10"
- 12"
- 15"
- 18"
- Diameter of New Force Main**
- 6"

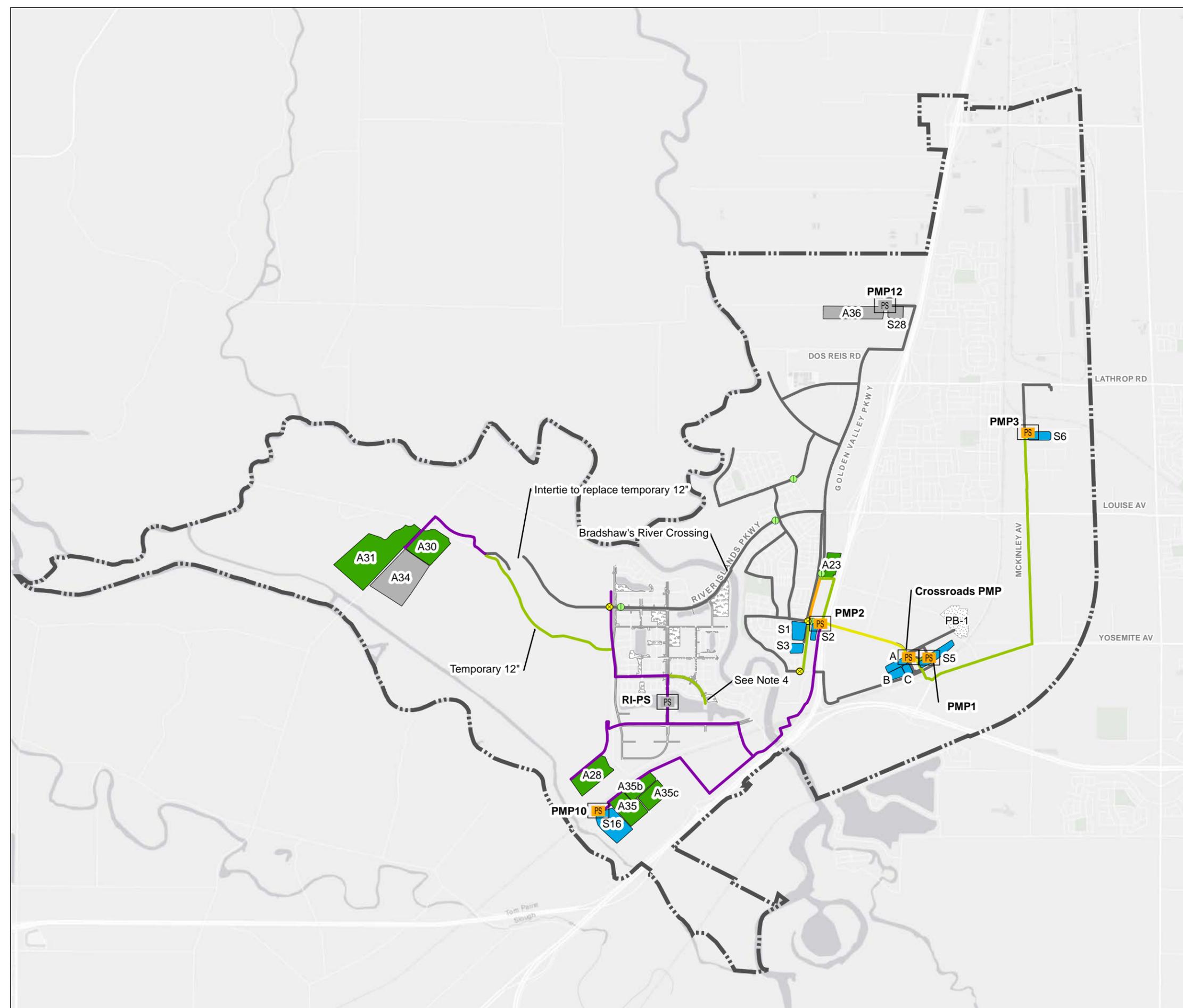


Source: eki environment & water, Recommended Collections System Improvement Projects, December 2018. Map date: January 28, 2019.

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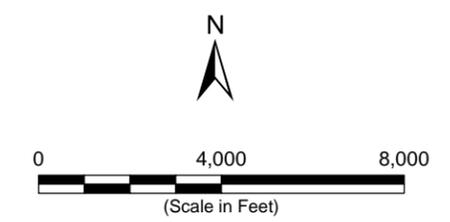
LATHROP
INTEGRATED WATER RESOURCES
MASTER PLAN

Figure 5.
Phase 1 Recycled Water System
Infrastructure Projects



Legend

- Pipe Diameter, Inches**
- 6 (Orange line)
 - 8 (Green line)
 - 10 (Red line)
 - 12 (Yellow line)
 - 16 (Purple line)
 - 18 (Cyan line)
 - 20 (Light Blue line)
 - 24 (Dark Blue line)
 - Inactive Pipe (Grey dashed line)
- Recycled Water Ponds**
- Phase 1 (Blue square)
 - Inactive (Phase 2A) (Grey square)
- Percolation Basins**
- Inactive (Phase 2A) (Dotted square)
- Agricultural Irrigation Use Areas**
- Phase 1 (Green square)
 - Inactive (Phase 2A) (Grey square)
- Landscape Irrigation Use Areas**
- Inactive (Phase 2A) (Dotted square)
- Recycled Water Pump Stations**
- Phase 1 (PS in orange box)
 - Inactive (Phase 2A) (PS in grey box)
- Other Infrastructure**
- Closed Valve (Yellow X)
 - Isolation Plate (Green circle)

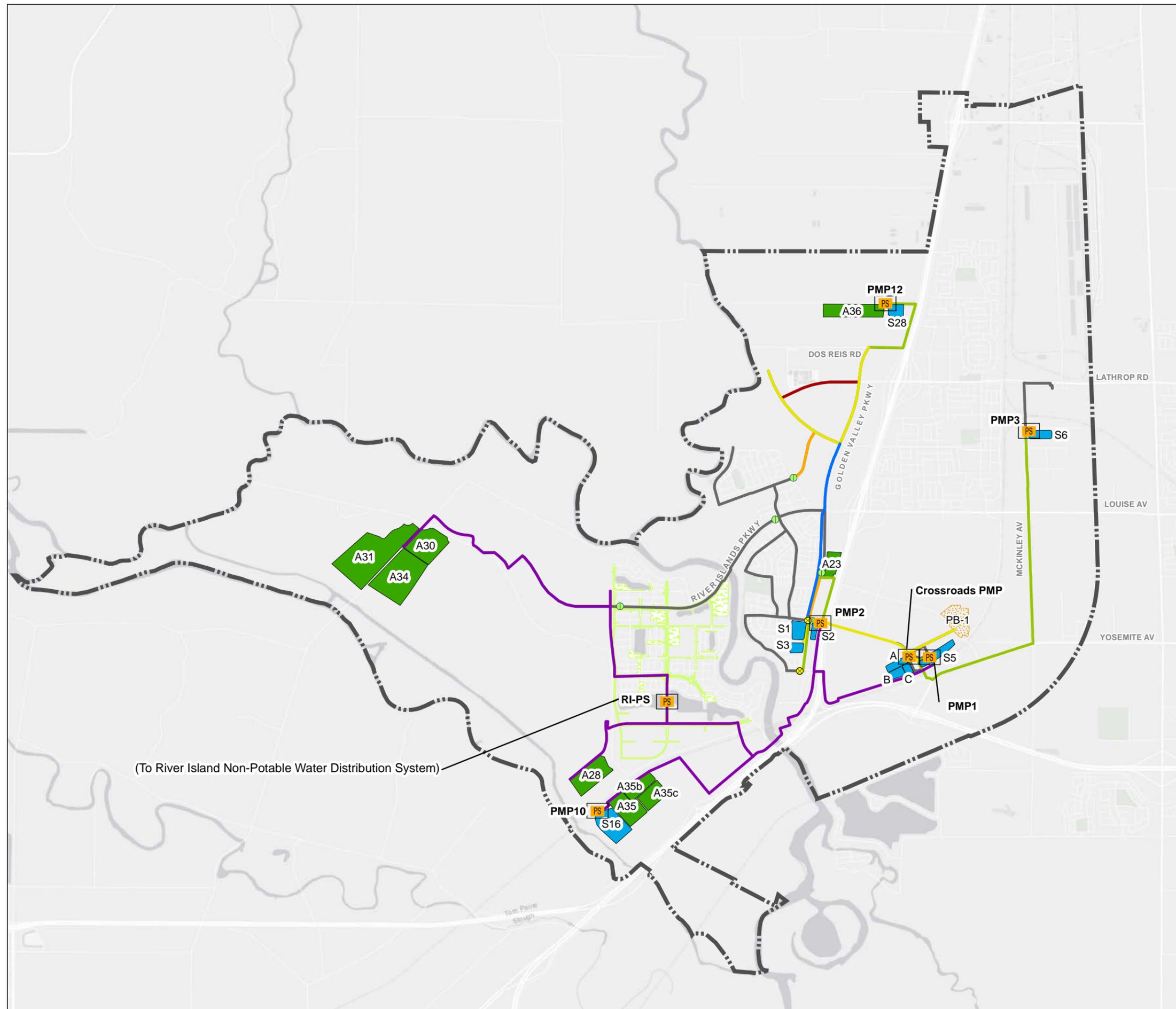


Source: eki environment & water, Phase 1
Recycled Water Systems Infrastructure,
December 2018. Map date: January 28, 2019.

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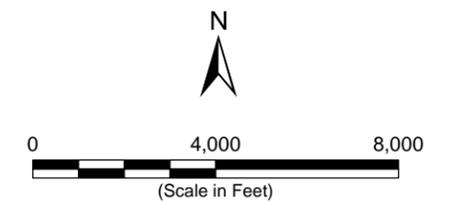
LATHROP
INTEGRATED WATER RESOURCES
MASTER PLAN

Figure 6.
Phase 2A Recycled Water System
Infrastructure Projects



Legend

- Sphere of Influence
- Pipe Diameter, Inches**
 - 6
 - 8
 - 10
 - 12
 - 16
 - 18
 - 20
 - 24
 - Inactive Pipe
- Recycled Water Distribution Infrastructure**
 - Storage Pond
 - Percolation Basin
 - Land Application Area
 - Landscape Irrigation Area
 - Pump Station
- Other Infrastructure**
 - Closed Valve
 - Isolation Plate

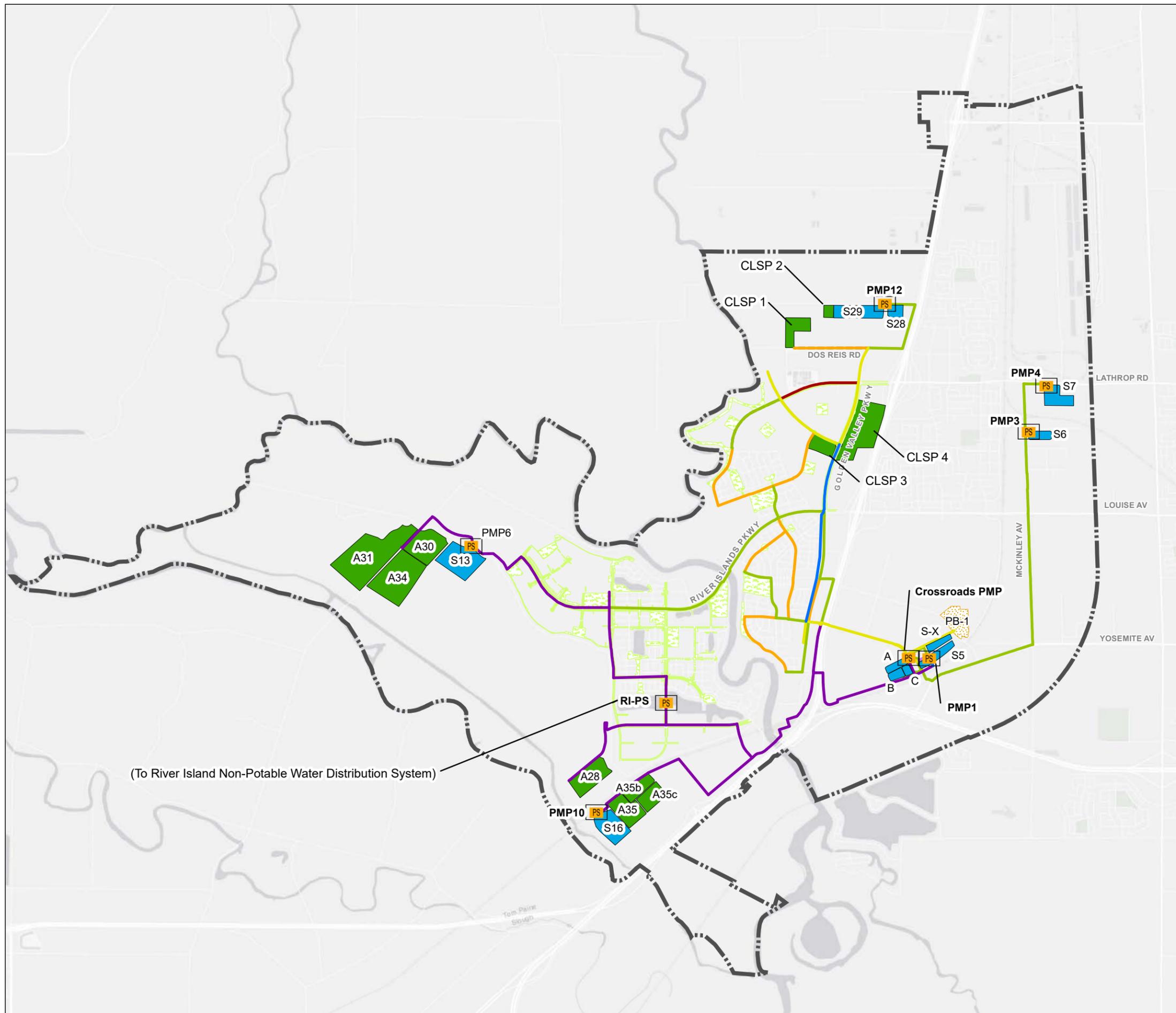


Source: eki environment & water, Phase 2A
Recycled Water Systems Infrastructure, December
2018. Map date: January 28, 2019.

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LATHROP
INTEGRATED WATER RESOURCES
MASTER PLAN

Figure 7.
Phase 2B Recycled Water System
Infrastructure Projects



Legend

Sphere of Influence

Pipe Diameter, Inches

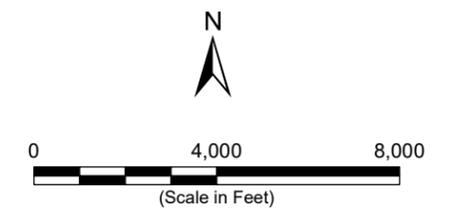
- | | | | |
|--|----|--|----|
| | 6 | | 16 |
| | 8 | | 18 |
| | 10 | | 20 |
| | 12 | | 24 |

Recycled Water Distribution Infrastructure

- Storage Pond
- Percolation Basin
- Land Application Area
- Landscaping Irrigation Area
- Pump Station

Other Infrastructure

- Closed Valve
- Isolation Plate



Source: eki environment & water, Phase 2B
Recycled Water Systems Infrastructure, December
2018. Map date: January 28, 2019.

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ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

Eight of the environmental factors listed below would have potentially significant impacts as a result of development of this project, as described on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
X	Biological Resources	X	Cultural Resources		Energy
X	Geology and Soils		Greenhouse Gasses	X	Hazards and Hazardous Materials
X	Hydrology and Water Quality		Land Use and Planning		Mineral Resources
	Noise		Population and Housing		Public Services
	Recreation		Transportation	X	Tribal Cultural Resources
X	Utilities and Service Systems		Wildfire	X	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 will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
X	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Chy Gibson, Senior Civil Engineer

Date

2/5/19

EVALUATION INSTRUCTIONS

- 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 where it is based on project-specific factors as well as general standards (e.g., the project will 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, then 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 where the incorporation of mitigation measures has reduced an effect from "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 (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other 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 they 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 Measures Incorporated," describe the mitigation measures which 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, where 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 less than significant.

EVALUATION OF ENVIRONMENTAL IMPACTS

In each area of potential impact listed in this section, there are one or more questions which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- **Potentially Significant Impact.** This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.
- **Less than Significant With Mitigation Incorporated.** This response applies when the incorporation of mitigation measures has reduced an effect from "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.
- **Less than Significant Impact.** A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- **No Impact.** These issues were either identified as having no impact on the environment, or they are not relevant to the project.

ENVIRONMENTAL CHECKLIST

This section of the Initial Study incorporates the most current Appendix "G" Environmental Checklist Form contained in the CEQA Guidelines. Impact questions and responses are included in both tabular and narrative formats for each of the 21 environmental topic areas.

I. AESTHETICS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Responses to Checklist Questions

Responses a), c): The City of Lathrop General Plan does not specifically designate any scenic viewsheds within the city. The existing Lathrop General Plan does, however, note Lathrop's scenic environmental resources including the San Joaquin River environment, and scenic vistas of the Coast Range and the Sierra.

For analysis purposes, a scenic vista can be discussed in terms of a foreground, middleground, and background viewshed. The middleground and background viewshed is often referred to as the broad viewshed. Examples of scenic vistas can include mountain ranges, valleys, ridgelines, or water bodies from a focal point of the forefront of the broad viewshed, such as visually important trees, rocks, or historic buildings. An impact would generally occur if a project would change the view to the middle ground or background elements of the broad viewshed, or remove the visually important trees, rocks, or historic buildings in the foreground.

Development of the majority of the proposed improvements will not significantly disrupt views from public viewpoints. The project would result in development of infrastructure facilities within currently developed areas (i.e., existing roadway right-of-way), as well as development of agricultural irrigation use areas within existing agricultural or public areas. This would contribute to changes in the visual character of the site. However, the majority of the proposed alterations to the project site would be at the terrestrial ground level and would not be visible from surrounding areas.

However, some of the proposed improvements, including generators, storage pond berms, and SCADA communication towers, would be visible from surrounding areas. For example, some of the generators near residential areas would be enclosed within a building or semi-enclosed within a masonry wall enclosure in order to help attenuate noise. The vertical structures required for generators in residential areas, however, would blend with the built environment and would not significantly alter the visual character of the existing residential areas. Similarly, the storage pond berms would be approximately 12- to 15-feet in height. The storage ponds would be located in agricultural areas of the City or clustered near existing storage ponds and/or LAAs. As such, the proposed storage ponds would also blend with the built environment and would not significantly alter the visual character of the area.

The proposed SCADA towers would be 50- to 100-feet in height, or taller. The proposed towers would be visible from public viewpoints in the City. The towers would be visible from nearby residences and businesses in the City of Lathrop and portions of unincorporated San Joaquin County. From the perspective of some residents, the addition of the towers could degrade the existing visual character and/or quality of the site and its surroundings; however, absent significant scenic visual qualities in the vicinity, there would not be a significant impact.

Implementation of the project would not greatly alter the areas overall characteristics. Therefore, implementation of the proposed project would have a *less than significant* impact relative to this topic.

Response b): The project site is not located within view of a state scenic highway. Only one highway section in San Joaquin County is listed as a Designated Scenic Highway by the Caltrans Scenic Highway Mapping System; the segment of Interstate 580 from Interstate 5 to State Route 205. The City of Lathrop is not visible from this roadway segment. Therefore, the proposed project would not substantially damage scenic resources, including, but not limited to, rock outcroppings, and historic buildings within a state scenic highway. Implementation of the proposed project would have *no impact* relative to this topic.

Response d): There is a potential for the implementation of the proposed project to introduce new sources of light and glare into the project area in the short-term only. Contributors to light and glare impacts would include temporary construction lighting that would create ongoing light impacts to the area. Nighttime construction activities are not anticipated to be required as part of on-site roadway construction. Operational lighting would not likely be required. However, should outdoor lighting be required for operation of the facilities, the lighting would be subject to Section 17.73.010 of the City's Municipal Code, which requires lighting to be in good operating condition and fully-shielded. Therefore, implementation of the proposed project would have a *less than significant* impact relative to this topic.

II. AGRICULTURE AND FORESTRY RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, 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?				X

Responses to Checklist Questions

Response a): The majority of the project site is located on Urban and Built-Up Land, Vacant or Disturbed Land, or Farmland of Local Importance. Some of the proposed future improvements would be located on Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. The proposed project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. Although some of the improvements (including water and recycled water pipes, land application areas for recycled water, and storage ponds for recycled water) would be located on Prime Farmland and Farmland of Statewide Importance, these listed improvements are considered agricultural uses.

The City currently provides recycled water to approximately seven land application areas, but plans to expand service to urban landscape irrigation areas. The City has approximately 222 acres of land application areas. These sites are generally sown with farm fodder crops such as rye grass or alfalfa. These sites are flood irrigated, with recycled water applied from a standpipe at the high side of the site. A mild slope directs water across the site. Return flows may be pumped from a tailwater return ditch to the high side of the site.

As noted in the Recycled Water System Master Plan, agricultural land application remains primarily a disposal method of the City's tertiary effluent but provides limited benefit to the City's water demand and supply portfolio. Currently the City staff manually operate the pumps to deliver recycled water to each land application areas when requested by the farmers. The City is planning to install a flow meter and automatic control valve with a radio telemetry system at each land application areas turnout to increase automation of system operations in Phase 2A.

New landscape irrigation areas will be added in River Islands as part of the Phase 2A CTF expansion. Landscape irrigation areas will include ornamental turf, shrubs, and trees along parkways, road medians, and parks. Crops are generally grown and harvested from a land

application area to take up wastewater constituents such as nitrogen and dissolved solids, as well as maintain roots which promote wastewater infiltration rates. When climatic conditions are favorable, double cropping a land application area can increase the uptake of wastewater constituents.

There will be a temporary impact to agricultural lands during construction of the water and recycled water pipes, land application areas for recycled water, and storage ponds for recycled water; however, once the pipelines are installed underground, the surface will be restored and remain available for agricultural use. Additionally, as detailed above, the land application areas and storage ponds are considered agricultural uses. The proposed project will not permanently convert any agricultural land. The farmers will still have access to surface lands with an underlying public utilities easement. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response b): The project site is not zoned for agricultural use nor is it under a Williamson Act contract. The proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response c): The project site is not forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526). The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response d): The project site is not forest land. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response e): The project site contains agricultural land and developed land. As noted above, there will be a temporary impact to some agricultural lands during construction; however, once the pipelines are installed underground, the surface will be restored and remain available for agricultural use. The proposed project will not permanently convert any agricultural land. The farmers will still have access to surface lands with an underlying public utilities easement. Implementation of the proposed project would have ***no impact*** relative to this issue.

III. AIR QUALITY

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?		X		
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		X		
c) Expose sensitive receptors to substantial pollutant concentrations?		X		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Existing Setting

The project site is located within the San Joaquin Valley Air Pollution Control District (SJVAPCD). This agency is responsible for monitoring air pollution levels and ensuring compliance with federal and state air quality regulations within the San Joaquin Valley Air Basin (SJVAB) and has jurisdiction over most air quality matters within its borders.

Responses to Checklist Questions

Responses a-c): Air quality emissions would be generated during construction of the proposed project. Operational emissions would be negligible as the project does not propose any new structures or uses that would increase trip generation or VMT's. Construction-related air quality impacts are addressed below.

Construction would result in numerous activities that would generate dust. Fine, silty soils and often strong afternoon winds exacerbate the potential for dust, particularly during the summer months. Grading, leveling, earthmoving and excavation are the activities that generate the most particulate emissions. Impacts would be localized and variable. The initial phase of project construction would involve grading and leveling the various project site areas and associated improvements such as underground infrastructure.

Construction activities that could generate dust and vehicle emissions are primarily related to grading and other ground-preparation activities in order to prepare the various project site areas for paving. All construction activities shall comply with all applicable measures from SJVAPCD Rule VIII which limits construction related emissions and particulates.

In addition to construction emissions, the SJVAPCD has thresholds applicable to CO emissions that require projects to perform localized CO modeling. These thresholds include the following:

- Project traffic would impact signalized intersections operating at level of service (LOS) D, E or F or would cause LOS to decline to D, E or F.
- Project traffic would increase traffic volumes on nearby roadways by 10 percent or more.
- The project would contribute to CO concentrations exceeding CAAQS of 9 parts per million (ppm) averaged over 8 hours and 20 ppm for one hour.

As described in greater detail under the traffic impact analysis section in this document, the proposed project is not a traffic generator and would not cause an intersection to decline to LOS D, E, or F. Additionally, the proposed project would not increase traffic volumes on nearby roadways by 10 percent or more. Therefore, localized CO modeling is not warranted for this project.

Because construction activities could generate dust and vehicle emissions, the following mitigation shall be incorporated into the construction plans of this project. With implementation of the following measures, this impact would be ***less than significant***.

Mitigation Measure 1: *Prior to the commencement of grading activities, the City shall require the contractor hired to complete the grading activities to prepare a construction emissions reduction plan that meets the requirements of SJVAPCD Rule VIII. The construction emissions reductions plan shall be submitted to the SJVAPCD for review and approval. The City of Lathrop shall ensure that all required permits from the SJVAPCD have been issued prior to commencement of grading activities.*

Mitigation Measure 2: *The following mitigation measures, in addition to those required under Regulation VIII of the SJVAPCD, shall be implemented by the project's contractor during all phases of project grading and construction to reduce fugitive dust emissions:*

- *Water previously disturbed exposed surfaces (soil) a minimum of two-times/day or whenever visible dust is capable of drifting from the site or approaches 20 percent opacity.*
- *Dust from all on-site and off-site unpaved access roads shall be effectively stabilized by applying water or other approved suppressants.*
- *Reduce speed on unpaved roads to less than 15 miles per hour.*
- *Restrict vehicular access to the area*
- *Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the end of each workday. (Use of dry rotary brushes is prohibited except when preceded or accompanied by sufficient wetting to limit visible dust emissions and the use of blowers is expressly forbidden.)*
- *Cease grading activities during periods of high winds (greater than 20 mph over a one-hour period).*
- *Asphalt-concrete paving shall comply with SJVAPCD Rule 4641 and restrict use of cutback, slow-sure, and emulsified asphalt paving materials.*

Response d): Sensitive receptors are those parts of the population that can be severely impacted by air pollution. Sensitive receptors include children, the elderly, and the infirm. The residents located to the east and west of the project site are considered sensitive receptors. However, as described below, the construction and operation of the proposed project would not contribute substantial concentrations of pollutants to sensitive receptors. Additionally, the proposed project would not contribute to any CO hotspots.

Due to the City-wide scope of the project area, there are existing schools in the project vicinity. Similarly, there are several existing residences located in the project vicinity. However, implementation of the proposed project would not expose these sensitive receptors to substantial pollutant concentrations. Air emissions would be generated during the construction phase of the project, but would be short term in duration. The construction phase of the project would be temporary and short-term, and the implementation of Mitigation Measures 1 and 2 would greatly reduce pollution concentrations generated during construction activities, and prevent spillover into residential areas. Operation of the proposed project would not result in increased emissions from vehicle trips. As described under Response a) – c) above, the proposed project would not generate significant concentrations of air emissions. Implementation of the proposed project would not result in a significant increased exposure of sensitive receptors to

localized concentrations of TACs, or create a CO hotspot. This project would have a ***less than significant*** impact relative to this topic.

Mitigation Measures: *Implement Mitigation Measure 1 and Mitigation Measure 2*

Response d): The proposed project would not generate objectionable odors. People in the immediate vicinity of construction activities may be subject to temporary odors typically associated with construction activities (diesel exhaust, hot asphalt, etc.). However, any odors generated by construction activities would be minor and would be short and temporary in duration.

Examples of facilities that are known producers of operational odors include: Wastewater Treatment Facilities, Chemical Manufacturing, Sanitary Landfill, Fiberglass Manufacturing, Transfer Station, Painting/Coating Operations (e.g. auto body shops), Composting Facility, Food Processing Facility, Petroleum Refinery, Feed Lot/Dairy, Asphalt Batch Plant, and Rendering Plant. If a project would locate receptors and known odor sources in proximity to each other further analysis may be warranted; however, if a project would not locate receptors and known odor sources in proximity to each other, then further analysis is not warranted. The project does not propose sensitive receptors that could be exposed to odors in the vicinity. Although the project would include wastewater system facilities, a wastewater treatment facility would not be constructed as a result of the project. Implementation of the proposed project would have a ***less than significant*** impact relative to this topic.

IV. BIOLOGICAL RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	X			
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	X			
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	X			
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?	X			
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	X			
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?	X			

Responses to Checklist Questions

Responses a-f): Based on the documented special status species, sensitive natural communities, wetlands, and other biological resources in the region, it has been determined that the potential impacts on biological resources caused by the proposed project will require a detailed analysis. As such, the lead agency will examine each of the environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact on biological resources. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is prepared in the EIR.

The EIR will provide a summary of local biological resources, including descriptions and mapping of plant communities, the associated plant and wildlife species, and sensitive biological resources known to occur, or with the potential to occur in the project vicinity. The analysis will conclude with a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented in order to reduce impacts on biological resources and to ensure compliance with federal and state regulations.

V. CULTURAL RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	X			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	X			
c) Disturb any human remains, including those interred outside of formal cemeteries?	X			

Responses to Checklist Questions

Response a-c): Based on known historical and archaeological resources in the region, and the potential for undocumented underground cultural resources in the region, it has been determined that the potential impacts on cultural resources caused by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the three environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact on cultural resources. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered *potentially significant* until a detailed analysis is prepared in the EIR.

The EIR will include an overview of the prehistory and history of the area, the potential for surface and subsurface cultural resources to be found in the area, the types of cultural resources that may be expected to be found, a review of existing regulations and policies that protect cultural resources, an impact analysis, and mitigation that should be implemented in order to reduce potential impacts to cultural resources. In addition, the CEQA process will include a request to the Native American Heritage Commission for a list of local Native American groups that should be contacted relative to this project. The CEQA process will also include consultation with any Native American groups that have requested consultation with the City of Lathrop.

VI. ENERGY

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Responses to Checklist Questions

Response a-b): Diesel-fired Emergency generators would be provided in conjunction with the proposed water pump station improvements shown previously in Table 1. The emergency generators will be added as the new essential facilities are constructed and brought on-line, such as the CLSP water tank, River Islands water tank/SSJID turnout, and sewer pump stations (see Table 2). The emergency generators would all be for emergency operations in the event of a power outage, and would otherwise only be run for maintenance and air quality permit testing requirements.

In Lathrop, the SJVAPCD regulates the use of diesel-fired emergency generators. As defined by the SJVAPCD, an emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. The emergency generators would not be used to produce power for the electrical distribution system (SJVAPCD District Rule 4702 and 17 CCR 93115). In addition, the SJVAPCD limits the operation of the emergency generators for maintenance, testing, and required regulatory purposes to a maximum of 50 hours per calendar year (SJVAPCD District Rules 2201, 4102 and 4702, and 17 CCR 93115). Since the use of the emergency generators would only occur during emergency scenarios, and otherwise only be run very briefly for maintenance and air quality testing requirements, the amount of diesel fuel used by these generators over the course of the lifetime of the proposed project would be minimal.

The exact amount of diesel fuel used by these generators would depend on the temporal extent of electrical power outages experienced during the lifetime of the proposed project, on the number of hours the generators are used for maintenance, testing, and the required regulatory purposes (i.e., up to 50 hours per calendar year). A typical 1502 brake-horsepower (BHP) Caterpillar Model C32 diesel-fired emergency engine (Tier 2 certified) would consume a maximum of approximately 71.9 gallons of diesel fuel per hour. This is based on an assumption of 100% load (Caterpillar, 2014).

Furthermore, the City of Lathrop is required by the SJVAPCD to maintain monthly records of emergency and non-emergency operation. These records are required to include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring (SJVAPCD District Rule 4702 and 17 CCR 93115). For units with automated testing systems, the operator of the diesel generator(s) has the option to, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule (SJVAPCD District Rule 4702 and 17 CCR 93115).

These requirements, as provided by the SJVAPCD, are described under the conditions contained within the Authority to Construct permit that the proposed project would be required to obtain prior to operation of the emergency generators. Based on these requirements, and the minimal amount of diesel fuel used by the emergency generators proposed by the proposed project, the proposed project would neither result in a wasteful, inefficient, or unnecessary consumption of energy resources, nor conflict with or obstruct any plan for renewable energy or energy efficiency. Implementation of the proposed project would result in a *less than significant* impact relative to this topic.

VII. GEOLOGY AND SOILS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	X			
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	X			
ii) Strong seismic ground shaking?	X			
iii) Seismic-related ground failure, including liquefaction?	X			
iv) Landslides?	X			
b) Result in substantial soil erosion or the loss of topsoil?	X			
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 on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	X			
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	X			
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			X	
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	X			

Responses to Checklist Questions

Responses a.i-d), and f): It has been determined that the potential impacts from geology and soils will require a detailed analysis in the EIR. As such, the lead agency will examine each of the environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact from geology and soils. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is prepared in the EIR.

The EIR will include a review of existing geotechnical reports, published documents, aerial photos, geologic maps and other geological and geotechnical literature pertaining to the site and

surrounding area to aid in evaluating geologic resources and geologic hazards that may be present. The EIR will include a description of the applicable regulatory setting, a description of the existing geologic and soils conditions on and around the project site, an evaluation of geologic hazards, a description of the nature and general engineering characteristics of the subsurface conditions within the project site, and the provision of findings and potential mitigation strategies to address any geotechnical concerns or potential hazards.

This section will provide an analysis including thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts associated with geology and soils.

Response e): The proposed project would not require the use of septic tanks or alternative waste water disposal systems for the disposal of waste water. Implementation of the proposed project would result in ***no impact*** relative to this topic.

VIII. GREENHOUSE GAS EMISSIONS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?			X	

Responses to Checklist Questions

Responses a), b): Implementation of the proposed project would not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. The project will expand utility systems in accordance with City master plans. Improvements to utility systems created by the project represent a planned effort to coordinate improvements to accommodate the future buildout of the General Plan. The project would not result in significant generation of construction or operational GHG emissions. Construction related GHG emissions would be temporary and would cease upon project completion. During operation, the project is not anticipated to generate substantial amounts of GHGs either directly or indirectly, as project infrastructure does not rely on sources of GHG emitting inputs for their operation. Emissions associated with project construction and operation would not be great enough to approach established significance thresholds, nor would it conflict with any plan policy or regulation regarding GHG reduction measures. Therefore, GHG impacts would be considered *less than significant*.

IX. HAZARDS AND HAZARDOUS MATERIALS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	X			
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?	X			
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	X			
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	X			
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	X			
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	X			
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	X			

Responses to Checklist Questions

Responses a-g): It has been determined that the potential impacts from hazards and/or hazardous materials by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact from hazards and/or hazardous materials. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is prepared in the EIR.

The EIR will include a review of existing environmental site assessments and any other relevant studies for the project site to obtain a historical record of environmental conditions. The analysis will also include a review of recent records and aerial photographs. A site reconnaissance will be performed to observe the site and potential areas of interest. Property owners/managers will be interviewed to gather information on the current and historical use of the properties, and the potential for project implementation to introduce hazardous materials to and from the area

during construction and operation. If environmental conditions are identified, mitigation measures, as applicable, will be identified to address the environmental conditions.

This section will provide an analysis including the methodology, thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts associated with hazards and hazardous materials.

X. HYDROLOGY AND WATER QUALITY

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	X			
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	X			
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	X			
(i) Result in substantial erosion or siltation on- or off-site;	X			
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	X			
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	X			
(iv) Impede or redirect flood flows?	X			
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	X			
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	X			

Responses to Checklist Questions

Responses a-e): Flood hazards can result from intense rain, snowmelt, cloudbursts, or a combination of the three, or from failure of a water impoundment structure, such as a dam. Floods from rainstorms generally occur between November and April and are characterized by high peak flows of moderate duration. Human activities have an effect on water quality when chemicals, heavy metals, hydrocarbons (auto emissions and car crank case oil), and other materials are transported with stormwater into drainage systems. Construction activities can increase sediment runoff, including concrete waste and other pollutants.

It has been determined that the potential impacts on hydrology and water quality caused by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine each of the potentially significant environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact on hydrology and water quality. At this point a definitive impact conclusion for each of these

environmental topics will not be made, rather all are considered *potentially significant* until a detailed analysis is prepared in the EIR.

The EIR will present the existing FEMA flood zones, levee protection improvements, reclamation districts, and risk of flooding on the project site and general vicinity.

The EIR will evaluate the potential construction and operational impacts of the proposed project on water quality. This section will describe the surface drainage patterns of the project site and adjoining areas, and identify surface water quality in the project site based on existing and available data. This section will identify impaired water bodies, listed pursuant to Section 303(d) of the federal Clean Water Act, in the vicinity of the project site. Conformity of the proposed project to water quality regulations will also be discussed. Mitigation measures will be developed to incorporate best management practices (BMPs), consistent with the requirements of the Central Valley Regional Water Quality Control Board to reduce the potential for site runoff.

This section will provide an analysis including the methodology, thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts associated with hydrology and water quality.

XI. LAND USE AND PLANNING

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

Responses to Checklist Questions

Response a): The project site is located within the Lathrop city limits and is adjacent primarily to undeveloped land, and agricultural land. The project site would result in a extensions of utility lines, development of land application areas, and development of pump stations and other related infrastructure. Development of the project would not result in any physical barriers, such as a wall, or other division, that would divide an existing community, but would serve as an orderly extension of existing utilities. The project would have **no impact** in regards to the physical division of an established community.

Response b): The key planning documents that are directly related to, or that establish a framework within which the proposed project must be consistent, include:

- City of Lathrop General Plan; and
- City of Lathrop Zoning Ordinance.

Due to the City-wide scope of the project area, there are numerous different land use and zoning designations in the project area. However, the proposed project would not require changes to any land use or zoning designations, and is supportive to the utility demands for each of these uses. Therefore, impacts to land use compatibility would be **less than significant**.

XII. MINERAL RESOURCES

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?				X
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?				X

Responses to Checklist Questions

Response a): The southeastern portion of the City General Plan Planning Area near the Stewart Tract and Oakwood Lake contains large Portland cement concrete (PCC)-grade sand deposit situated along the San Joaquin Rivers. This sector is classified as Mineral Resources Zone (MRZ)-2 (PCC sand). Implementation of the project would not result in the loss of availability of known mineral resources in the aforementioned area. The project site does not contain a known mineral resource that would be of value to the region and the residents of the state. The proposed project would not result in loss of an important regional or state mineral resource. Implementation of the proposed project would have ***no impact*** relative to this issue.

Response b): The project site does not contain a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. As noted above, known mineral resources that would be of value to the region no longer exist within the project site. The proposed project would not result in loss of a mineral resource. Implementation of the proposed project would have ***no impact*** relative to this issue.

XIII. NOISE

<i>Would the project result in:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

Responses to Checklist Questions

Response a): The City of Lathrop General Plan Noise Element contains goals and policies for assessing noise impacts within the City.

The Goals of the Noise Element of the General Plan are to protect citizens from the harmful effects of exposure to excessive noise, and to protect the economic base of the City by preventing the encroachment of incompatible land uses near noise-producing roadways, industries, the railroad, and other sources.

Listed below are the noise policies that are applicable to the proposed project:

1. Areas within the City shall be designated as noise-impacted if exposed to existing or projected future noise levels exterior to buildings exceeding 60 dB CNEL or the performance standards prescribed in Table VI-1.
2. New development of residential or other noise sensitive land uses will not be permitted in noise impacted areas unless effective mitigation measures are incorporated into project designs to reduce noise to the following levels:

Land Use Category	Community Noise Exposure L _{dn} or CNEL, #d						INTERPRETATION:
	55	60	65	70	75	80	
Residential - Low Density Single Family, Duplex, Mobile Homes							Normally Acceptable Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
Residential - Multi-Family							
Transient Lodging - Motels, Hotels							Conditionally Acceptable New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							Normally Unacceptable New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							Clearly Unacceptable New construction or development should generally not be undertaken.
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

- 2a. Noise sources preempted from local control, such as railroad and highway traffic:
 - 60 dB CNEL or less in outdoor activity areas;
 - 45 dB CNEL within interior living spaces or other noise-sensitive interior spaces.
 - Where it is not possible to achieve reductions of exterior noise to 60 dB CNEL or less by using the best available and practical noise reduction technology, an exterior noise level of up to 65 dB CNEL will be allowed.
 - Under no circumstances will interior noise levels be allowed to exceed 45 dB CNEL with windows and doors closed.
- 2b. For noise from other sources, such as local industries:
 - 60 dB CNEL or less in outdoor activity areas;
 - 45 dB CNEL or less within interior living spaces, plus the performance standards contained in Table VI-1.
3. New development of industrial, commercial or other noise generating land uses will not be permitted if resulting noise levels will exceed 60 dB CNEL in areas containing residential or other noise-sensitive land uses. Additionally, new noise generating land uses which are not preempted from local noise regulation by the State of California will not be permitted if resulting noise levels will exceed the performance standards contained in Table VI-1 in areas containing residential or other noise-sensitive land uses.
4. Noise level criteria applied to land uses other than residential or other noise-sensitive uses shall be consistent with the recommendations of the California Office of Noise Control.
5. New equipment and vehicles purchased by the City shall comply with noise level performance standards consistent with the best available noise reduction technology.

Additionally, the City of Lathrop Noise Ordinance sets limits for community noise exposure, similar to those outlined above in the General Plan Noise Element. The Noise Ordinance standards are contained in Section 8.20.040 of the Lathrop Municipal Code. Construction activities are exempt from these regulations, when conducted according to Section 8.20.110, as outlined below.

Sound Level A, Decibels Community Environment Classification				
Zone	Time	Very Quiet	Slightly Quiet	Noisy
		(rural, suburban)	(suburban, urban)	(urban)
R1 and R2	10 pm to 7 am	40	45	50
	7 pm to 10 pm	45	50	55
	7 am to 7 pm	50	55	60
R3 and R4	10 pm to 7 am	45	50	55
	7 am to 10 pm	50	55	60
Commercial	10 pm to 7 am	50	55	60
	7 am to 10 pm	55	60	65
M1	anytime	70	70	70
M2	anytime	75	75	75

Pursuant to Section 8.20.110 of the City's Noise Ordinance, it shall be unlawful for any person within a residential zone or within a radius of five hundred (500) feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures or projects or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of ten p.m. of one day and seven a.m. of the next day, or eleven p.m. and nine a.m. Fridays, Saturdays and legal holidays, in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless beforehand a permit therefore has been duly obtained from the office or body of the city having the function to issue permits of this kind. No permit shall be required to perform emergency work as defined in Sections 8.20.010 through 8.20.040. (Prior code § 99.40).

Construction Noise

Construction activities have the potential to create temporary, or periodic increases in ambient noise levels in the project vicinity above levels existing without the project. During the construction of the project, including water, sewer, and recycled water lines, and related infrastructure, noise from construction activities would add to the noise environment in the project vicinity. The site improvements and roadway construction would include the use of heavy equipment including grading and compacting that can generate noise. Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration and would likely occur primarily during daytime hours.

Table 3 provides a list of the types of equipment which may be associated with construction activities and the associated noise levels. The nearest residential receptors would be located roughly 50 feet or further from construction activities, although most construction activities would be over 300 feet from a receptor.

Table 3: Construction Equipment Noise

Type of Equipment	Predicted Noise Level (L_{max} Db)				Distances To Noise Contours (Feet)	
	Noise Level At 50'	Noise Level At 100'	Noise Level At 50'	Noise Level At 100'	Noise Level At 50'	Noise Level At 100'
Backhoe	78	72	66	60	126	223
Compactor	83	77	71	65	223	397
Compressor (air)	78	72	66	60	126	223
Dozer	82	76	70	64	199	354
Dump Truck	76	70	64	58	100	177
Excavator	81	75	69	63	177	315
Generator	81	75	69	63	177	315

SOURCE: ROADWAY CONSTRUCTION NOISE MODEL USER'S GUIDE. FEDERAL HIGHWAY ADMINISTRATION. FHWA-HEP-05-054. JANUARY 2006.

Construction activities would be temporary in nature and are exempt from noise regulation, as outlined in the City's Municipal Code Section 8.20.110. Additionally, the project site was assumed for urban development as part of the City's General Plan and General Plan EIR. Build-out of the City's General Plan land use map, including the proposed project site, will inherently result in construction and construction-related noise levels. Adherence to City Municipal Code would minimize any impacts from noise during construction to the extent practicable. Because of the nature time and duration of construction activities near sensitive receptors noise impacts from construction activities would cease upon project completion. Therefore, implementation of the proposed project would have a **less than significant** impact relative to this topic.

The proposed project would not result in operational traffic noise. The proposed project would not cause increased noise levels exceeding the City of Lathrop exterior noise level standard at existing noise-sensitive residential receptors. Therefore, this impact would be considered **less than significant** relative to this topic.

Response b): Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by several factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Table 4 indicates that the threshold for damage to structures ranges from 0.2 to 0.6 peak particle velocity in inches per second (in/sec p.p.v). One-half this minimum threshold or 0.1 in/sec p.p.v. is considered a safe criterion that would protect against architectural or structural damage. The general threshold at which human annoyance could occur is noted as 0.1 in/sec p.p.v.

Table 4: Effects of Vibration on People and Buildings

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/sec.	in./sec.		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

SOURCE: CALTRANS. *TRANSPORTATION RELATED EARTHBOEN VIBRATIONS. TAV-02-01-R9601 FEBRUARY 20, 2002.*

The vibration-generating activities typically happen during construction when activities such as grading, utilities placement, and road construction occur. Sensitive receptors which could be impacted by construction-related vibrations, especially vibratory compactors/rollers, are located approximately 100 feet or further from the activity. At this distance, construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table 5 shows the typical vibration levels produced by construction equipment.

Table 5: Vibration Levels for Varying Construction Equipment

Type of Equipment	Peak Particle Velocity @ 25 feet (inches/second)	Peak Particle Velocity @ 100 feet (inches/second)
Large Bulldozer	0.089	0.011
Loaded Trucks	0.076	0.010
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.011
Jackhammer	0.035	0.004
Vibratory Hammer	0.070	0.009
Vibratory Compactor/roller	0.210	0.026

SOURCE: FEDERAL TRANSIT ADMINISTRATION, *TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT GUIDELINES, MAY 2006.*

Table 5 data indicate that construction vibration levels anticipated for the proposed project are less than the 0.1 in/sec criteria at distances of 50 feet. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors.

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and roadway

construction occur. Sensitive receptors could be impacted by construction related vibrations. The nearest residential receptors would be located roughly 50 feet or further from construction activities, although most construction activities would be over 300 feet from a receptor. At these distances, construction vibrations are not predicted to exceed acceptable levels. The use of construction equipment near existing receptors will not exceed the 0.1 in/sec threshold of annoyance criteria and threshold for structure damage of 0.2 in/sec. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. Therefore, this impact would be considered *less than significant*.

Response c): The project site is not located within the vicinity of an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The Stockton Metropolitan Airport is located approximately 2.8 miles north of the Lathrop City limits. The proposed project would, therefore, not expose people residing or working in the project area to excessive noise levels associated with such airport facilities. The project site is not located within the vicinity of a private airstrip. The proposed project would, therefore, not expose people residing or working in the project area to excessive noise levels associated with such private airport facilities. Implementation of the proposed project would have *no impact* relative to this topic.

XIV. POPULATION AND HOUSING

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Responses to Checklist Questions

Response a): The project does not propose any housing that would result in direct population growth. However, projects that do not directly induce population growth still have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. The project will expand utility systems. However, improvements to utility systems created by the project represent a planned effort to coordinate improvements to accommodate the future buildout under the General Plan. Any individual future projects would have to be consistent with the General Plan and are subject to environmental review under CEQA. No substantial population increases would result from implementation of the proposed project. Therefore, implementation of the proposed project would have a *less than significant* impact relative to this topic.

Response b): The project site is located within the Lathrop city limits and contains developed roadways, undeveloped land, and agricultural land. The proposed project would not displace housing or people. Implementation of the proposed project would have *no impact* relative to this topic.

XV. PUBLIC SERVICES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

*Responses to Checklist Questions***Response a):****Fire Protection**

The project site is currently under the jurisdiction of the Lathrop-Manteca Fire Department. The proposed project would not include additional residential units, or people to the City of Lathrop. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for fire protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for fire protection services from the Lathrop Fire Department. Therefore, implementation of the proposed project will have **no impact** Lathrop-Manteca to this topic.

Police Protection

The project site is currently under the jurisdiction of the Lathrop Police Department. The proposed project would not include additional residential units, or people to the City of Lathrop. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. No additional demand for police protection will be created by the project. Implementation of the proposed project wouldn't require additional demands for police protection services from the Lathrop Police Department. Therefore, implementation of the proposed project will have **no impact** relative to this topic.

Schools

Most schools within the City of Lathrop are part of the Manteca Unified School District (MUSD). The MUSD provides school services for grades kindergarten through 12 (K-12) within the communities of Manteca, Lathrop, Stockton, and French Camp. The District is approximately 113 square miles and serves more than 23,000 students. Within the City of Lathrop, there are three elementary schools (Lathrop Elementary School, Joseph Widmer School, and Mossdale Elementary School) and one high school (Lathrop High School). River Islands has two charter elementary schools, located within the Banta Unified School District (River Islands Technology Academy and the S.T.E.A.M. Academy). The proposed project does not include any residential units, or any other type of use that would directly, or indirectly increase the student population in the area. The proposed project will not result in intensification of land use, or the addition of

structures or uses that would differ from the current General Plan. Therefore, the proposed project would not result in the need for new school facilities, thus it is anticipated to have ***no impact*** relative to this topic.

Parks

The proposed project does not include any residential units or any other type of use that would directly, or indirectly increase the population, or park demand in the area, or include any other type of use that would directly increase the park needs. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not have the potential to require construction of additional park and recreational facilities which may cause substantial adverse physical environmental impacts. This, it is anticipated to have ***no impact*** relative to this topic.

Other Public Facilities

The proposed project would not result in a need for other public facilities that are not addressed in the Utilities and Service Section. The proposed project does not trigger the need for new facilities associated with other public services. The proposed project will not result in intensification of land use, or the addition of structures or uses that would differ from the current General Plan. Consequently, new facilities or other public services are not proposed at this time. This, it is anticipated to have ***no impact*** relative to this topic.

XVI. RECREATION

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project 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?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Responses to Checklist Questions

Responses a-b): The proposed project does not include any residential units or any other type of use that would increase the population, or park and recreation facility demand in the area, or include any other type of use that would directly increase the use of park and recreation facilities. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. Therefore, the proposed project would not significantly increase the use of existing facilities. Furthermore, it is not anticipated that any substantial physical deterioration of existing facilities would occur, or be accelerated. Implementation of the proposed project would have a ***no impact*** relative to this topic.

XVII. TRANSPORTATION

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

Responses to Checklist Questions

Responses a-b): No new structures, uses, or visitor serving areas are included in the project. Therefore, the project is not expected to result in an overall increase in vehicle trips within the area. The project is not anticipated to increase vehicle trips or congestion, or decrease LOS. Therefore, impacts are considered ***less than significant*** relative to this topic.

Response c): No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The project does not include any design features or incompatible uses that pose a significant safety risk. The project would create no adverse impacts to emergency vehicle access or circulation. Therefore, project implementation would have a ***less than significant*** impact relative to this topic.

Response d): No site circulation or access issues have been identified that would cause a traffic safety problem/hazard or any unusual traffic congestion or delay that could impede emergency vehicles or emergency access. The project does not include any design features or incompatible uses that pose a significant safety risk. The project would create no adverse impacts to emergency vehicle access or circulation. Therefore, project implementation would have a ***less than significant*** impact relative to this topic.

XVIII. TRIBAL CULTURAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	X			
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resources to a California Native American tribe.	X			

Responses to Checklist Questions

Responses a.i), a.ii): Based on known historical, cultural, tribal, and archaeological resources in the region, and the potential for undocumented underground cultural resources in the region, it has been determined that the potential impacts on tribal cultural resources caused by the proposed project will require a detailed analysis in the EIR. As such, the lead agency will examine the two environmental issues listed in the checklist above in the EIR and will decide whether the proposed project has the potential to have a significant impact on tribal cultural resources. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered **potentially significant** until a detailed analysis is prepared in the EIR.

The EIR will include an overview of the prehistory and history of the area, the potential for surface and subsurface tribal cultural resources to be found in the area, the types of tribal cultural resources that may be expected to be found, a review of existing regulations and policies that protect tribal cultural resources, an impact analysis, and mitigation that should be implemented in order to reduce potential impacts to tribal cultural resources. In addition, the CEQA process will include a request to the Native American Heritage Commission for a list of local Native American groups that should be contacted relative to this project, as per the requirements of Assembly Bill (AB) 52. The CEQA process will also include consultation with any Native American groups that have requested consultation with the City of Lathrop.

XIX. UTILITIES AND SERVICE SYSTEMS

<i>Would the project:</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Require or result in the relocation or construction of new or expanded water, wastewater or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	X			
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	X			
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments?	X			
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	X			
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	X			

Responses to Checklist Questions

Responses a-e): Implementation of the proposed project would result in impacts related to utilities and service systems. As such, the EIR will examine each of the five environmental issues listed in the checklist above and will decide whether the proposed project has the potential to have a significant impact to utilities and service systems. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is prepared in the EIR.

The EIR will analyze wastewater, water, and storm drainage infrastructure, as well as other utilities (i.e. solid waste, gas, electric, etc.). The EIR will analyze the impacts associated with on-site construction of the proposed water, wastewater, and recycled water system, including temporary impacts associated with the construction phase. The proposed infrastructure will be presented. The EIR will provide a discussion of the wastewater treatment plants that are within proximity to the project site, including current demand and capacity at these plants. The analysis will discuss the disposal methods and location, including environmental impacts and permit requirements associated with disposal of treated wastewater.

The EIR will identify permit requirements and mitigation needed to minimize and/or avoid impacts related to storm water and drainage. The EIR will include an assessment for consistency with City Master Plans and Management Plans that are directly related to these utilities.

The EIR will analyze the impacts associated with on-site and off-site construction of the water system, including temporary impacts associated with the construction phase. The EIR will also

identify permit requirements and mitigation needed to minimize and/or avoid impacts, and will present the proposed infrastructure as provided by the Master Plans.

The EIR will also address solid waste collection and disposal services. This will include an assessment of the existing capacity and project demands. The assessment will identify whether there is sufficient capacity to meet the project demands.

The EIR will provide thresholds of significance, a consistency analysis, cumulative impact analysis, and a discussion of feasible mitigation measures that should be implemented to reduce impacts associated with utilities and service systems.

XX. WILDFIRE

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
d) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

Responses to Checklist Questions

Responses a, c) The project includes development of infrastructure (water, sewer, and recycled water). The proposed infrastructure improvements would allow for decreased fire risk relative to existing conditions. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed infrastructure improvements would require maintenance; however, the infrastructure improvements would not exacerbate fire risk. Therefore, impacts from project implementation would be considered **less than significant** relative to this topic.

Response b) The risk of wildfire is related to a variety of parameters, including fuel loading (vegetation), fire weather (winds, temperatures, humidity levels and fuel moisture contents) and topography (degree of slope). Steep slopes contribute to fire hazard by intensifying the effects of wind and making fire suppression difficult. Fuels such as grass are highly flammable because they have a high surface area to mass ratio and require less heat to reach the ignition point. The County has areas with an abundance of flashy fuels (i.e. grassland) in the foothill areas of the eastern and western portion of the County. The project site is located in an area that is predominately agricultural and urban, which is not considered at a significant risk of wildfire. Therefore, impacts from project implementation would be considered **less than significant** relative to this topic.

Response d) The project does not propose any housing that would result in direct population growth. However, projects that do not directly induce population growth still have the potential to result in indirect population growth through the creation of jobs or the extension of infrastructure into areas that were not previously served. The proposed project will not result in intensification of land uses, or the addition of structures or uses that would differ from the current General Plan. The project will expand utility systems. As such, exposure to people or structures to any significant risk would not result. Therefore, impacts from project implementation would be considered **less than significant** relative to this topic.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Does the project have the potential to substantially 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?	X			
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)?	X			
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X			

Responses to Checklist Questions

Responses a-c): It has been determined that the potential for the proposed project to: degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of a rare or endangered plant or animal; eliminate important examples of the major periods of California history or prehistory; create cumulatively considerable impacts; or adversely affect human beings will require more detailed analysis in an EIR. As such, the EIR will examine each of these environmental issues and will decide whether the proposed project has the potential to have a significant impact on these environmental issues. At this point a definitive impact conclusion for each of these environmental topics will not be made, rather all are considered ***potentially significant*** until a detailed analysis is prepared in the EIR.

REFERENCES

- California Air Resources Board. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. October 2000. Available at: <<https://www.arb.ca.gov/diesel/documents/rrpFinal.pdf>>.
- California Air Resources Board. 2016. ARB Databases: Aerometric Data Analysis and Management System (ADAM). Available at: <<http://www.arb.ca.gov/html/databases.htm>>.
- California Department of Conservation. 2016. California Important Farmland Finder. Available at: <<http://maps.conservation.ca.gov/ciff/ciff.html>>.
- California Department of Conservation. California Land Conservation Act of 1965 2016 Status Report, The Williamson Act. December 2016.
- California Department of Transportation. Transportation Related Earthborn Vibrations. TAV-02-01-R9601 February 20, 2002.
- California Energy Commission. 2005. Global Climate Change: In Support of the 2005 Integrated Energy Policy Report. (CEC-600-2005-007.) Available at: <<http://www.energy.ca.gov/2005publications/CEC-100-2005-007/CEC-100-2005-007-CMF.PDF>>.
- California Energy Commission. 2006. Inventory of California Greenhouse Gas Emissions and Sinks 1990 to 2004. (CEC-600-2006-013-SF.) Available at: <<http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-SF.PDF>>.
- Caterpillar. Diesel Generator Set – Mission Critical 1000 ekW 1250 kVa 60 Hz 1800 rpm 480 Volts. Available at: <<http://s7d2.scene7.com/is/content/Caterpillar/C10252389>>. 2014.
- City of Lathrop. Adopted December 17, 1991. City of Lathrop Comprehensive General Plan.
- City of Lathrop. 1991. Comprehensive General Plan for the City of Lathrop, California. Adopted by the Lathrop City Council December 17, 1991.
- City of Lathrop. 1991. Final Environmental Impact Report for the Comprehensive General Plan for the City of Lathrop, California.
- City of Lathrop. 2004. Central Lathrop Specific Plan Draft EIR.
- City of Lathrop. 2014. City of Lathrop Department of Public Works Design and Construction Standards.
- City of Lathrop. 2016. Municipal Service Review and Sphere Of Influence Plan.
- City of Lathrop. 2017. Lathrop Municipal Code. Current through Ordinance 18-397 and the August 2018.
- City of Lathrop. 2018. City of Lathrop General Plan Update – Existing Conditions Report. Admin Draft – October 2018.

- City of Lathrop. 2018. Wastewater System Master Plan - City of Lathrop – Integrated Water Resources Master Plan Update. Draft – December 2018.
- City of Lathrop. 2018. Water System Master Plan - City of Lathrop – Integrated Water Resources Master Plan Update. December 2018.
- City of Lathrop. 2018. Recycled Water System Master Plan - City of Lathrop – Integrated Water Resources Master Plan Update. December 2018.
- Federal Highway Administration. Roadway Construction Noise Model User’s Guide, FHWA-HEP-05-054. January 2006.
- Federal Transit Administration. Transit Noise and Vibration Impact Assessment Guidelines. May 2006
- Intergovernmental Panel on Climate Change. 2007. Climate Change 2007: The Physical Science Basis, Summary for Policy Makers. Available at: <http://fire.pppl.gov/ipcc_summary_020207.pdf>.
- West Yost Associates, 2018. Technical Memorandum: Infrastructure Analysis for the City of Lathrop General Plan Update. June 29, 2018.

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