

SANTA ROSA SUBREGIONAL WATER REUSE SYSTEM

INCREMENTAL RECYCLED WATER PROGRAM

2020 Addendum to Program Environmental Impact Report and CEQA Checklist for Disinfection and Diversion Improvements

November 19, 2020

State Clearinghouse #2002072046

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1. INTRODUCTION AND SUMMARY

On November 6, 2003, the City of Santa Rosa, the managing partner of the Subregional Water Reuse System, certified the Program Environmental Impact Report (Program EIR) for the Incremental Recycled Water Program (IRWP). In February, 2004, the City identified a Preferred Program from the six potential alternatives analyzed in the Program EIR and prepared the February 2004 Recycled Water Master Plan (Master Plan). In March 2004 the City considered an EIR Addendum (2004 Addendum) and approved the Master Plan and Selected Program. A component of the Selected Program is the Laguna Plant Upgrade component, which identifies numerous facilities to be upgraded over time within the footprint of the existing Laguna Treatment Plant, including the UV disinfection facilities and hypochlorite facilities.

In April 2007 the City considered a second EIR Addendum (March 2007 Addendum) and approved changes to the Master Plan to bring it into conformance with the Santa Rosa Urban Reuse Project Feasibility Study (January 2007). In August 2007 the City considered a third EIR Addendum (August 2007 Addendum) and approved the 2007 Update to the Recycled Water Master Plan for the Geysers Expansion Project.

The City continues to implement its Master Plan and now intends to consider disinfection and associated improvements at the Laguna Treatment Plant as part of the Laguna Plant Upgrade component.

PROGRAM OBJECTIVES

The Program Objectives identified for IRWP in the Certified Program EIR remain the same.

SUMMARY OF IMPROVEMENTS, APPLICABILITY OF ADDENDUM AND CEQA CHECKLIST

The Disinfection and Diversion Improvements (improvements) include replacement of the existing ultraviolet (UV) disinfection facilities which is already included in the Laguna Plant Upgrade component of IRWP and evaluated in the Certified Program EIR. The improvements also include installation of flow diversion facilities, a new electrical load center for the new UV facilities, and modification to the existing stormwater collection system.

This environmental review document serves two purposes:

- As an Addendum to the Program EIR, prepared under the California Environmental Quality Act (CEQA) Guidelines Section 15164, to make minor changes to the Project Description; and
- As a CEQA Checklist prepared under CEQA Guidelines Section 15168(c)(4), to analyze whether environmental effects of the Disinfection and Diversion Improvements were covered in the Program EIR. This document also serves as the evaluation pursuant to Section 15162 of the CEQA Guidelines of whether new significant effects have been identified or new mitigation measures would be required.

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The proposed changes to the Laguna Plant Upgrade component are shown in Table 1.1 below. In addition to the proposed physical improvements, clarification is proposed to Figure 2-4, Laguna Plant Upgrade, of the IRWP Certified EIR to remove “Construction Zone” from the legend. Figure 2-4 identifies three construction zones in which the expansion facilities included in the Laguna Plant Upgrade component would be constructed. While the construction zones were provided as an estimated location of the future facilities, they imply exact locations for the facilities. To clarify and provide flexibility in the placement of future facilities within the site, the construction zone boundary is removed.

Table 1.1 Evaluation of Disinfection and Diversion Improvements

Laguna Plant Upgrade Component Changes	Addendum to Program EIR	Project-level CEQA Checklist
Replace UV Disinfection Facilities (19,400 sf) <ul style="list-style-type: none"> - Influent channel - Concrete at-grade structure with 5 channels - Control and electrical room - Metal, 3-wall building over channels - Relocate/replace Hypochlorite System - Relocate/replace construction trailer 	Evaluated in Program EIR; inclusion in Addendum not needed.	Yes
Construct New Flow Diversion Facilities <ul style="list-style-type: none"> - Wet well & pump station - 42-inch Pipeline to Flow Equalization Basins (2,000 lf) 	Yes	Yes
Construct New Electrical Load Center <ul style="list-style-type: none"> - Concrete foundation & masonry building (1,100 sf) - Electrical duct bank (1,300 lf) 	Yes	Yes
Construct Stormwater Facilities <ul style="list-style-type: none"> - Wet well & pump station 	Yes	Yes
Modify Figure 2-4 Laguna Plant Upgrade	Yes	NA

This 2020 Addendum evaluates the flow diversion facilities, electrical load center, stormwater facilities, and modified Figure 2-4, and concludes that the revisions to the Laguna Plant Upgrade component do not cause new significant impacts and do not result in substantially more severe impacts relative to the impacts previously disclosed in the IRWP Certified EIR. Thus, an Addendum is the appropriate level of CEQA documentation and the appropriate method of amending the IRWP Certified EIR, pursuant to Sections 15162 and 15164 of the Guidelines implementing CEQA.

This CEQA Checklist also concludes that the UV disinfection facilities, flow diversion facilities, electrical load center, and stormwater facilities are described in, and are within the scope of the IRWP Certified EIR, and that no new effects would occur and no new mitigation measures would be required, and thus no new environmental document, such as a subsequent EIR, is required.

The Addendum and CEQA Checklist evaluations take into consideration changes in the environmental setting, cumulative projects, and regulations that have occurred since the IRWP Certified EIR was last updated in August 2007. This Addendum and CEQA Checklist should be

read together with the full text of the IRWP Certified EIR, the 2004 Addendum, and the March and August 2007 Addenda (together known as the IRWP Certified EIR). The complete IRWP Certified EIR is available for review at www.SRCity.org/IRWP.

ORGANIZATION OF THE ADDENDUM AND CEQA CHECKLIST

The 2020 Addendum/CEQA Checklist is organized in a similar fashion to the Program EIR.

- Chapter 1 is the introduction and summary.
- Chapter 2 contains a detailed description of the Disinfection and Diversion Improvements.
- Chapter 3, Mitigation and Monitoring Program, describes the monitoring program for the Disinfection and Diversion Improvements.
- Chapter 4 includes the program-level environmental analysis of the new flow diversion facilities, new electrical load center, stormwater facilities, and modified Figure 2-4 of the IRWP Program EIR.
- Chapter 5 includes the project-level CEQA Checklist to determine whether the Disinfection and Diversion Improvements are within the scope of the Program EIR.
- Chapter 6 provides a list of references.
- Chapter 7 provides a list of preparers.

PUBLIC AND AGENCY INVOLVEMENT

The Addendum and CEQA Checklist and the Disinfection and Diversion Improvements are anticipated to be considered at the Santa Rosa Board of Public Utilities meeting, held over Zoom, at 1:30 p.m. on November 19th, 2020. To participate in the meeting, please visit the City of Santa Rosa website (<https://santa-rosa.legistar.com/Calendar.aspx>) and review the Agenda and Summary Report for login instructions specific to the November 19th meeting.

Written comments should be mailed or emailed to:

City of Santa Rosa
69 Stony Circle
Santa Rosa, CA 95401
Attn: Mark Kasraie
Email: mkasraie@srcity.org

APPLICABILITY AND USE OF AN ADDENDUM FOR PROJECT ELEMENTS NOT INCLUDED IN PROGRAM EIR

As directed by CEQA, California Public Resources Code Section 21166, and CEQA Guidelines Section 15162, when an EIR has been prepared for a project, no subsequent or supplemental EIR shall be prepared, unless one or more of the following circumstances occur:

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1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The change in environmental impacts due to the diversion and stormwater improvements and changed conditions have been evaluated and measured against the standards set forth in paragraphs 1, 2, and 3 above to determine whether an Addendum is appropriate or a subsequent or supplemental EIR is needed. The environmental analysis in Chapter 4 provides the detailed examination of each of these issues. The changes to the Laguna Plant Upgrade component have been subjected to a detailed analytical process consistent with the methodology and thresholds of significance applied in the Program EIR.

Section 15164 of the Guidelines implementing CEQA provides that an Addendum is the appropriate level of CEQA analysis when the circumstances defined in Section 15162 and 15163 calling for preparation of a Subsequent or Supplemental EIR do not occur. None of the circumstances that require a Subsequent or Supplemental EIR, such as new significant impacts or significant impacts of a substantially more severe nature, are present. Thus, an Addendum is the appropriate level of CEQA analysis and the appropriate method of updating the analysis in the IRWP Certified EIR.

USE OF THE PROGRAM EIR FOR THE DISINFECTION AND DIVERSION IMPROVEMENTS

As directed by CEQA Guidelines Section 15168, when a Program EIR has been prepared for a project, the lead agency should use a written checklist to document its findings, as follows:

(c) Use With Later Activities. Later activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.

1. If a later activity would have effects that were not examined in the program EIR, a new initial study would need to be prepared leading to either an EIR or a negative declaration.
2. If the agency finds that pursuant to Section 15162, no subsequent EIR would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required. Whether a later activity is within the scope of a program EIR is a factual question that the lead agency determines based on substantial evidence in the record. Factors that an agency may consider in making that determination include, but are not limited to, consistency of the later activity with the type of allowable land use, overall planned density and building intensity, geographic area analyzed for environmental impacts, and covered infrastructure, as described in the program EIR.
3. An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into later activities in the program.
4. Where the later activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were within the scope of the program EIR.
5. A program EIR will be most helpful in dealing with later activities if it provides a description of planned activities that would implement the program and deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed project description and analysis of the program, many later activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.

The proposed UV disinfection facilities, flow diversion facilities, electrical load center, stormwater improvements, and clarification to Figure 2-4 have been subjected to a detailed analytical process consistent with the methodology and thresholds of significance applied in the Program EIR. The environmental analysis in Chapter 5 provides the site-specific examination of the site and activity as required under paragraph (4) above. Chapter 5 concludes that the effects of the improvements are the same as, or less than, the effects identified in the IRWP Certified EIR, a program EIR. Chapter 5 also concludes the improvements are covered by, and are within the scope of the IRWP Certified EIR. Because the effects of the improvements are

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ADDENDUM AND CHECKLIST

consistent with the requirements of Section 15168 of the Guidelines implementing CEQA, no further environmental documentation is required beyond this document.

2. PROJECT DESCRIPTION

PROJECT LOCATION

The Disinfection and Diversion Improvements would be located within the existing footprint of the Laguna Treatment Plant (LTP) as shown in Figure 2-1, Vicinity Map. The Laguna Treatment Plant is located in central Sonoma County southeast of Santa Rosa. Because the Laguna Treatment Plant property has been incorporated into the City of Santa Rosa, all improvements would be located within the City of Santa Rosa. The improvements are shown in Figure 2-2, Site Plan.

The majority of the improvements would be located in the southwest portion of the existing LTP site, with some improvements along the eastern edge, as shown in Figure 2-2, Site Plan. The majority of the footprint of the improvements is currently paved, with the remainder designated as “ruderal grassland” and currently comprised of either gravel or gravel mixed with compacted soil.

LAGUNA PLANT UPGRADE COMPONENT REVISIONS

The proposed improvements relate to the Laguna Plant Upgrade component of the IRWP Certified EIR, and include the following elements: 1) replace and relocate UV disinfection facilities; 2) construct new electrical load center; 3) construct new flow diversion facilities; 4) construct stormwater improvements; and 5) modify Figure 2-4 of the IRWP Program EIR. These elements are described in detail below.

UV Disinfection Facilities

The replacement UV disinfection facilities would be located to the west of the existing UV facility in an area that currently houses a construction trailer, storage sheds, and the hypochlorite storage and feed system. The existing trailer and hypochlorite storage and feed system would be replaced and relocated to accommodate the new disinfection facilities.

The disinfection facilities would restore the capacity to 25 million gallons per day (mgd) average dry weather flow and 70 mgd peak hour flow, and consist of the following:

- Replace existing influent channel connection to deliver tertiary effluent from the filters to the new UV disinfection facility.
- Replace, in a new location, the existing UV disinfection facility, including:
 - Concrete structure with five channels for UV equipment
 - UV equipment cleaning and maintenance area including wash tanks
 - Control and electrical room
 - Channel and diversion gates to control effluent flow to Llano pump station.
 - Junction structure for connection to existing effluent piping and for temporary flow bypass during construction
 - Metal building over UV channels for weather and sun protection, with three walls and open on the north end (14,860 square feet)

- Overhead bridge crane for equipment maintenance
- Replace, in a new location, the existing hypochlorite storage and feed facility of similar size and capacity.
 - Two chemical storage tanks and feed pumps.
 - Storage and feed facility would be covered by a metal weather-protection canopy of approximately 1,200 square feet.
- Replace, in a new location, the existing construction trailer to serve as the construction facility for the Contractor and construction manager during construction of these improvements. After construction is complete, the trailer would be utilized by the City as a training facility, similar to the use of the existing trailer.

Electrical Load Center

A new electrical load center would be needed to support the disinfection improvements. The new electrical power facilities would include a 1,100 square-foot concrete foundation and masonry building to house the switchgear, motor control center, and control equipment. The building would be located adjacent to the existing W3 pump station. A new 1,300 linear-foot ductbank would feed 12-KV power from the existing Electrical Substation M-2 to the new electrical load center. Exterior lighting would be provided similar to existing lighting throughout the LTP and include cut-off fixtures and manual shutoffs.

Flow Diversion Facilities

The replacement flow diversion facilities would consist of a new diversion wet well and pump station to be installed south of the new disinfection facility and north of the LTP main entrance. The pump station would pump diverted flow via a new 2,000 linear-foot, 42-inch diameter pipeline to the existing Flow Equalization Basins. The diversion pipeline would be located under existing paved areas on the LTP's southern and eastern access roads. The flow diversion facilities would provide the capacity for 25 mgd average dry weather flow and 70 mgd peak hour flow. Exterior lighting would be provided similar to existing lighting throughout the LTP and include cut-off fixtures and manual shutoffs.

Stormwater Improvements

Stormwater within the LTP facility is currently collected and routed to six existing discharge points into the Laguna de Santa Rosa along the southern boundary of the LTP. Stormwater improvements would include a new wet well and pump station, 850 linear feet of 24-inch collection pipeline, and replacement of a stormwater inlet. Stormwater discharge volumes would remain the same as existing conditions. Exterior lighting would be provided similar to existing lighting throughout the LTP and include cut-off fixtures and manual shutoffs.

Modify Laguna Plant Upgrade Figure

Figure 2-4, Laguna Plant Upgrade, of the IRWP Program EIR would be modified to remove "Construction Zone" from the legend. Figure 2-4 currently identifies three construction zones in which the expansion facilities included in the Laguna Plant Upgrade component would be

constructed. Page 2-37 of the IRWP Program EIR, describes the Laguna Plant Upgrade component as including expansion of numerous in-plant processes within the existing footprint of the site, with the potential to disturb up to 15 acres and permanent facilities increased by up to 3 acres. The construction zones were depicted in the original Figure 2.4 to show an approximate location of the proposed future facilities and were never intended to depict the exact locations for the individual facilities. To provide flexibility in the placement of future facilities within the LTP site, the construction zone boundary depictions would be removed and replaced with a single area within which the disturbance would occur. Expansion facilities identified in Figure 2-4 could occur anywhere within the LTP site shown on Figure 2-4.

Construction

Construction is expected to begin in spring 2021 and last for 24 to 30 months. The features of construction are outlined below and shown on Figure 2 Site Plan.

Access during Construction

The site access for construction would be the main plant entrance road from Llano Road. It is expected traffic control on Llano Road would be required during periods of major deliveries and construction vehicle access. Traffic control requirements would be coordinated with the County.

Import and On-site Storage Volumes

The major construction improvements and associated excavation and import and export truck trips are outlined below, in Table 2.1. Approximately 16,000 cubic yards (CY) of excavated materials would be placed on a concrete pad adjacent to the compost facility on the west side of Llano Road for temporary on-site storage. The material would be used for future projects requiring clean fill.

Table 2.1 Construction Import and Export Volumes

Improvement	Excavation Volume (CY)	On-site Excavated Material Storage		Import Concrete		Import ABC or Bedding		Material Delivery
		Volume (CY)	Truck Loads	Volume (CY)	Truck Loads	Volume (CY)	Truck Loads	Truck Loads
UV Facility	17,800	9,800	980	2,470	247	2,010	201	25
Hypochlorite Facility	270	240	24	60	6	90	9	5
Diversion WW/PS	5,500	4,200	420	1,000	100	250	25	5
Diversion Piping	4,700	0	0	0	0	425	43	30
Stormwater WW/PS	1,500	960	96	360	36	70	7	5
Stormwater Piping	2,500	0	0	0	0	260	26	20
Yard Piping (misc)	1,400	0	0	0	0	270	27	5
Construction Trailer	240	200	20	130	13	40	4	5
Electrical Load Center	410	330	33	110	11	290	29	10
Electrical Ductbank	500	300	30	150	15	150	15	5
Misc Material Delivery								10

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ADDENDUM AND CHECKLIST

		On-site Excavated Material Storage		Import Concrete		Import ABC or Bedding		Material Delivery
Improvement	Excavation Volume (CY)	Volume (CY)	Truck Loads	Volume (CY)	Truck Loads	Volume (CY)	Truck Loads	Truck Loads
Total	34,820	16,030	1,603	4,280	428	3,855	386	125

Sequence of Construction

The improvements would be constructed in four phases over 24 to 30 months, including two dry weather construction seasons. Each phase would last from 6 to 8 months. The phasing outlined below would be incorporated into the sequence and constraints for the installation contractor.

Phase 1 – The initial phase of construction would include the following:

- Site clearing and utility relocation,
- Flow diversion wet well and pump station excavation and construction,
- Hypochlorite storage and feed facility construction and commissioning,
- Electrical load center construction and initial electrical power distribution and duct banks,
- Temporary construction trailer installation.
- Floodwall temporarily removed and stockpiled during dry weather. In the wet season the floodwall will be placed around the work area, with an opening in the wall for construction access. In the event of an impending storm that could result in flooding of the LTP, the access opening would be filled.

Phase 2 –The second phase of construction would include:

- Existing hypochlorite facility demolition,
- Existing trailer demolition,
- Northern portion of the UV facility construction,
- Flow diversion junction structure construction,
- Flow diversion pipeline construction,
- Continued electrical power distribution and duct banks construction.

Phase 3 – The third phase of construction would include:

- Setup, testing and startup of temporary bypass pumping system using the flow diversion wet well and temporary pumping,
- Existing effluent pipeline demolition,
- Southern portion of the UV facility construction,
- Flow diversion testing and stormwater pump station installation and testing.
- Storm drain installation, and completion of yard piping
- Electrical load center start up and power distribution / ductbank completion.
- Delivery of UV equipment,

- Installation of remaining mechanical equipment.

Phase 4 – The last phase of construction would include:

- UV equipment installation and startup testing,
- UV facility canopy / pre-engineered building installation,
- Flow diversion and stormwater pump stations commissioning and startup,
- Final paving and grading improvements,
- Temporary trailer to permanent facilities conversion,
- Temporary floodwall reinstallation.

UPDATED AND REVISED MITIGATION AND MONITORING PROGRAM

Several Project Measures and Mitigation Measures (Sections 3.2, 3.3, and 3.5 respectively) that apply to the improvements, and were adopted as part of the Mitigation Monitoring Program for the IRWP, are proposed to be revised to conform to existing regulations, increase feasibility, and reduce impacts. The proposed revisions are shown in Chapter 3.0, Mitigation and Monitoring Program, in strike out and underline mode for deletion and addition respectively. In addition, Section 3.1 Compliance with Existing Programs, is shown in its entirety and updated to reflect current regulations.

EMPLOYMENT GENERATION

The Disinfection and Diversion Improvements are not expected to require additional operations or maintenance staff, as the majority of the contemplated improvements would simply replace or modify existing facilities.

REQUIRED PERMITS AND APPROVALS

The following table lists the possible permits and approvals that would be required for implementation of the Disinfection and Diversion Improvements.

Table 2.2 Potentially Applicable Federal, State, Regional, County, and City Permits and Approvals

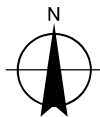
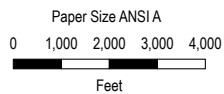
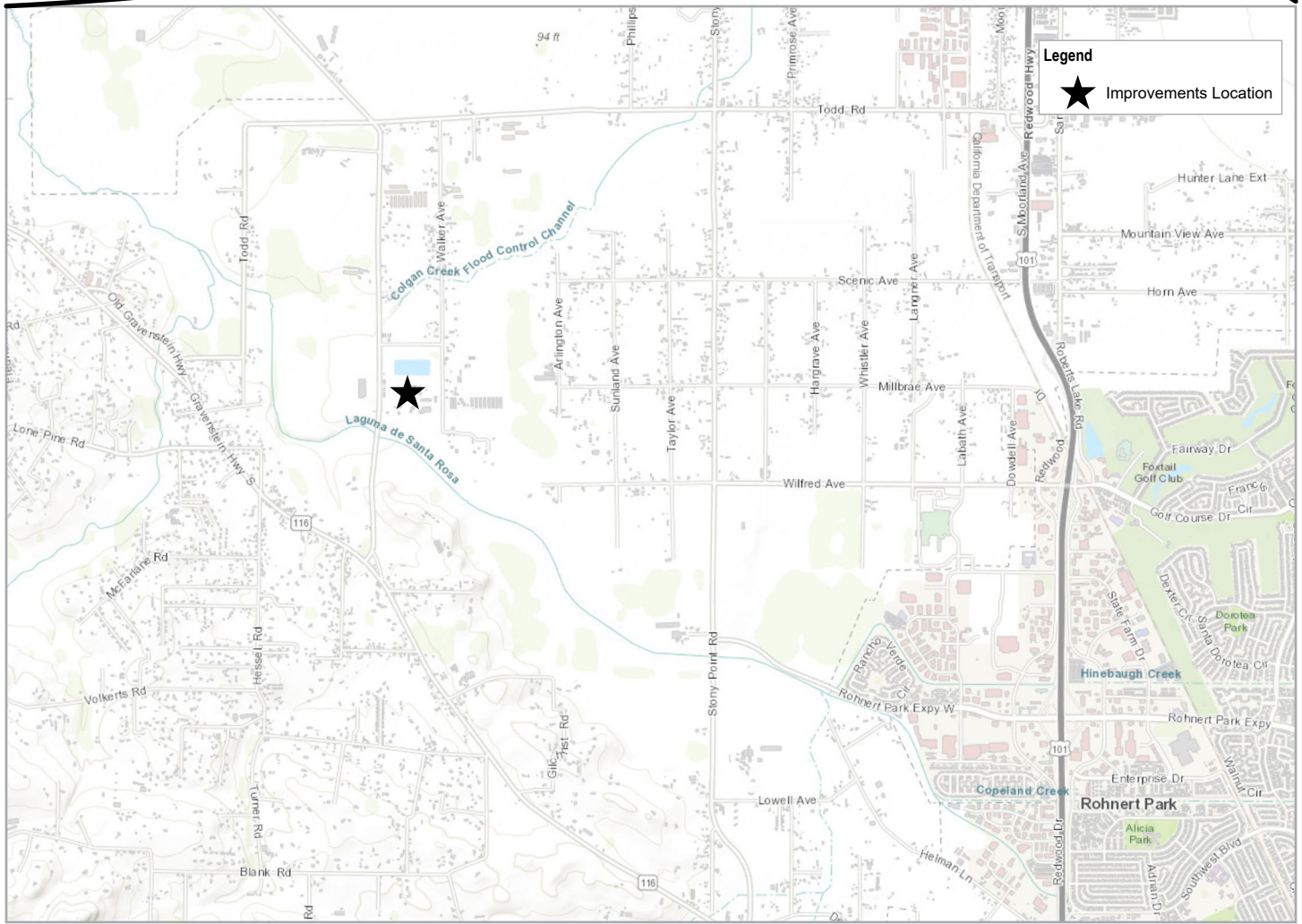
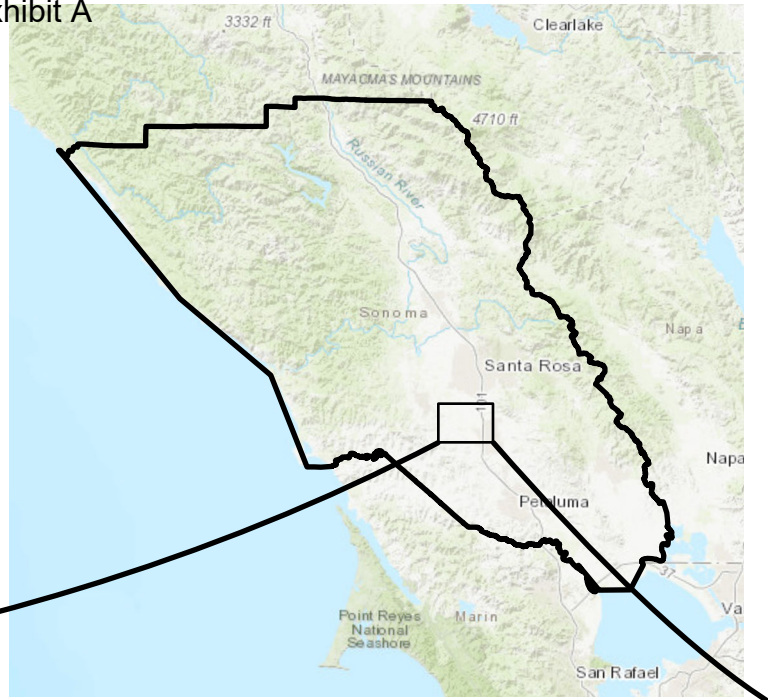
Agency	Type of Permit or Approval	Regulated Activity
Federal Agency		
None		
State Agency		
State Water Resources Control Board	NOI – Construction Stormwater Pollution Prevention Plan	Improvements would disturb more than 1 acre.
Regional Agency		
North Coast Regional Water Quality Control Board	Notice of Intent to Comply	Replacement of SW inlet may require NOI for low threat discharge.

Exhibit A

Table 2.2 Potentially Applicable Federal, State, Regional, County, and City Permits and Approvals

Agency	Type of Permit or Approval	Regulated Activity
Sonoma County		
Sonoma County Public Works Department	Encroachment Permit	Improvements may include traffic control activities in Llano Road, including placement of temporary traffic signage.

Exhibit A



**City of Santa Rosa
Disinfection and Diversion Improvements**

Project No. 11110005
Revision No. -
Date Sept 2020

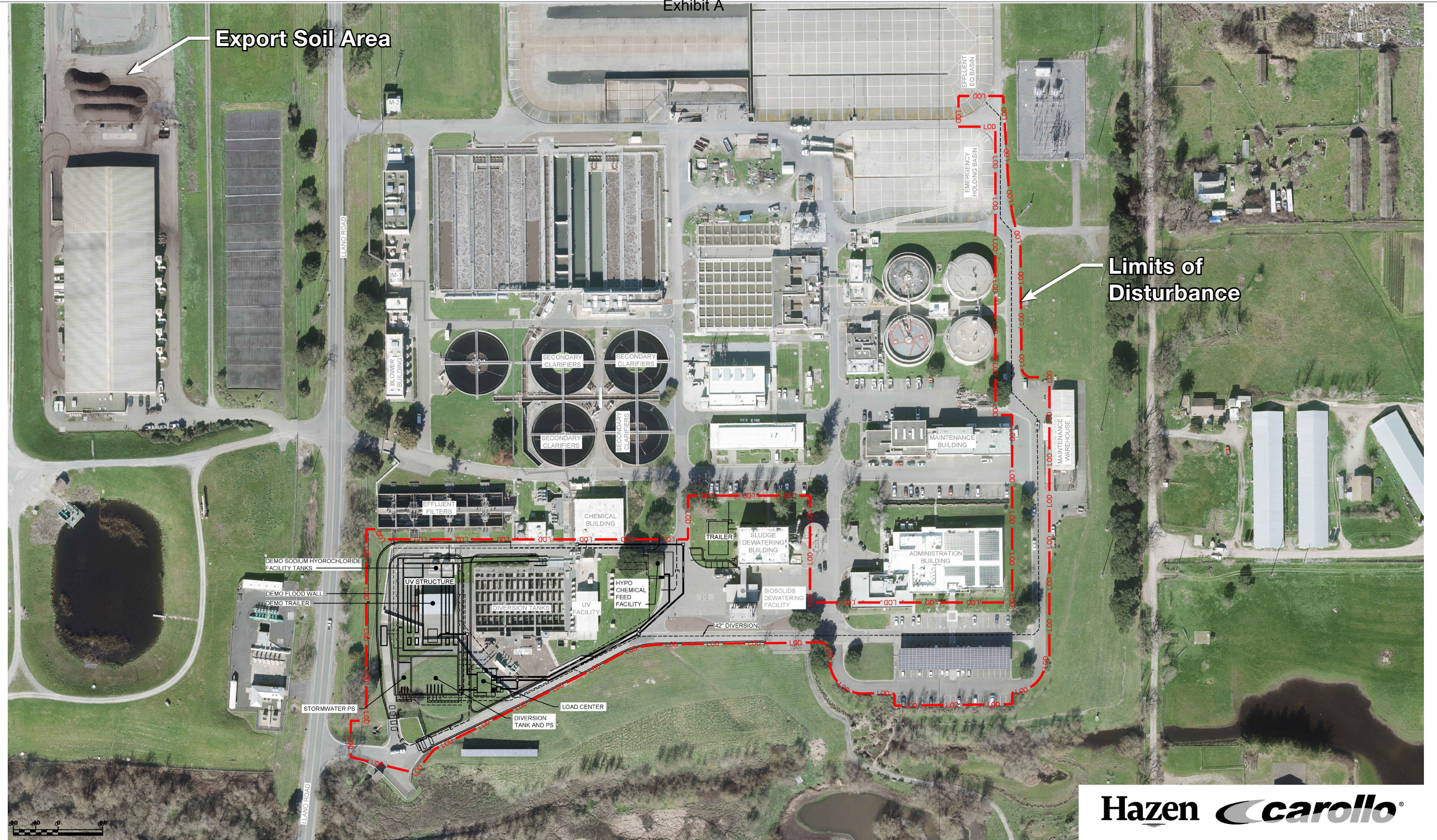
Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California II FIPS 0402 Feet

Vicinity Map

FIGURE 2-1

Export Soil Area

Limits of Disturbance



Hazen *carollo*



City of Santa Rosa
Disinfection and Diversion Improvements

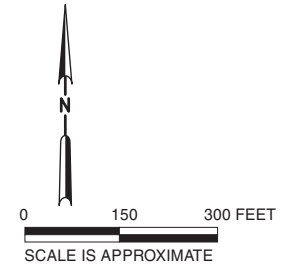
Project No. 11110005
Revision No.
Date Oct 2020

Site Plan

FIGURE 2-2

EXISTING FACILITIES

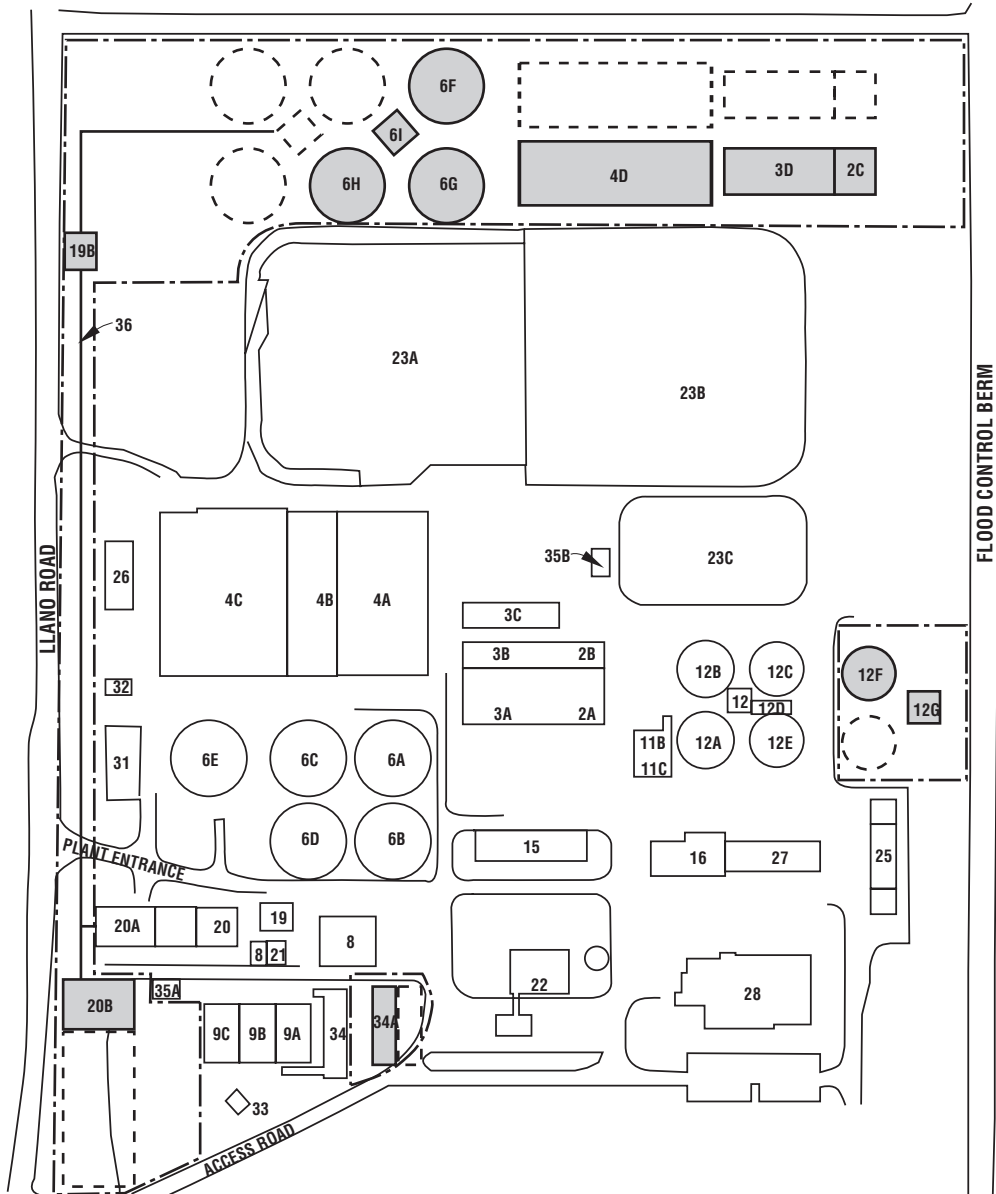
NUMBER	NAME
1	SEPTAGE HANDLING FACILITY
2A,B	INFLUENT PUMP STRUCTURE AND GRIT CHAMBER
3A,B,C	PRIMARY SEDIMENTATION BASIN
4A,B,C	AERATION AND NITRIFICATION TANKS
5	COGENERATION BUILDING
6	RAS PUMP STATION
6A,B,C,D,E	SECONDARY CLARIFIERS
7	WAS PUMP STATION
8	CHEMICAL BUILDING
9A,B,C	DIVERSION TANKS (FORMERLY CHLORINE CONTACT TANKS)
10	DECHLORINATION AND EFFLUENT METERING
11B,C	SLUDGE THICKENER BUILDING
12	DIGESTER GAS BUILDING AND GALLERY
12A,B,C,E	ANAEROBIC DIGESTERS
12D	DIGESTER GAS BUILDING AND GALLERY EXTENSION
15	LAGUNA ANNEX
16	MAINTENANCE BUILDING
17	DIGESTER GAS FLARE
19	FILTER SUPPLY PUMP STATION
20,A	FILTERS
21	FILTER CONTROL BUILDING
22	BIOSOLIDS DEWATERING FACILITY
23A,B	PRIMARY EFFLUENT EQUALIZATION BASIN
23C	EMERGENCY HOLDING BASIN
24	RETURN PUMP STATION
25	MAINTENANCE WAREHOUSE
26	EMERGENCY GENERATOR FACILITY
27	MAINTENANCE BUILDING EXTENSION
28	ADMINISTRATION BUILDING
30	GAS BOOSTER BUILDING
31	BLOWER BUILDING
32	BLOWER ELECTRICAL BUILDING
33	W3 PUMP STATION
34	UV DISINFECTION FACILITY
35A,B	SODIUM HYPOCHLORITE FACILITY



- NOTES:**
1. THE PERMANENT FOOTPRINT FOR ALL EXPANSION FACILITIES IS APPROXIMATELY 3 ACRES.
 2. THE CONSTRUCTION ZONE INCLUDING THE PERMANENT FOOTPRINT IS APPROXIMATELY 15 ACRES.

EXPANSION FACILITIES

NUMBER	NAME
2C	INFLUENT PUMPING AND GRIT CHAMBER
3D	PRIMARY SEDIMENTATION BASINS
4D	AERATION TANKS
6F, G, H,	SECONDARY CLARIFIERS
6I	RAS PUMP STATION
12F	ANAEROBIC DIGESTER
12G	DIGESTER CONTROL BUILDING
19B	FILTER SUPPLY PUMP STATION
20B	FILTERS
34A	ULTRAVIOLET DISINFECTION
36	SECONDARY EFFLUENT TRANSMISSION PIPE
- - - - -	PERMANENT FOOTPRINT OF FUTURE FACILITIES
 	CONSTRUCTION ZONE



3. MITIGATION AND MONITORING PROGRAM

As noted in Chapter 2 Project Description, minor updates and modifications have been made and are shown on the following pages in strike out and underline mode to indicate deletion of existing text and addition of new text, respectively. Because modifications are being made to some measures included in the project description and some mitigation measures, these measures are shown in their entirety for clarity. However, some portions of the measures do not apply to the Disinfection and Diversion Improvements, and therefore are not carried into the project-specific Mitigation and Monitoring Program that has been prepared to accompany the resolution approving the project, if such action is taken.

MITIGATION AND MONITORING PROGRAM

This Chapter presents the Mitigation and Monitoring Program for the Santa Rosa Incremental Recycled Water Program (IRWP) Disinfection and Diversion Improvements. The mitigation measures listed herein are required by law or regulation (Section 3.1); are adopted by the City as part of the Project (Section 3.2); or are recommended by the consultant team (Sections 3.3, 3.4, and 3.5).

Mitigation measures listed below have been identified in Chapter 5 as feasible and effective in mitigating Project-related environmental impacts. The effectiveness of each measure is identified in this Chapter and discussed in detail in Chapter 5.

Legal Basis

Public Resources Code Sections 21002 and 21002.1, part of the California Environmental Quality Act, provide the legal basis for the development and implementation of a Mitigation and Monitoring Program:

- Public agencies are not to approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects; and
- Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.

Further, Public Resources Code Section 21081.6 requires that: “[t]he public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.” The monitoring program must be adopted when a public agency makes its findings under CEQA so that the program can be made a condition of project approval in order to mitigate significant effects on the environment.

Chapter Format

Section 3.1 Compliance with Existing Programs

This section presents the applicable federal, state, regional, county, and local policies and regulations with which the IRWP must comply. These laws and regulations are identified in Chapter 2 of the IRWP EIR under Required Permits and Approvals. This section has been updated in its entirety to reflect current regulations. However, not all are applicable to the Laguna Plant Upgrade component.

Section 3.2 Measures Included in the Project

This section presents a listing and description of measures and standards that have been incorporated into the Project Description in order to avoid or minimize potential environmental impacts. These measures represent standard engineering, design, construction, and maintenance practices.

However, these measures have been included in this chapter to provide a mechanism for monitoring and to assist the reader in understanding the commitments made by the Santa Rosa Subregional Water Reclamation System. Section 3.2 includes measures to be implemented in all phases of the Project, including planning and design, construction, and system operation and maintenance.

Section 3.3 Planning Measures

This section contains mitigation measures to be implemented during the final planning and detailed design of the Project. These measures often require the refinement of the final Project design to accommodate particular environmental constraints.

Section 3.4 Construction Measures

This section contains mitigation measures to be implemented prior to, during, and immediately following Project construction. These measures generally require certain constraints during construction and repair and rehabilitation of impacts resulting from construction of the Project.

Section 3.5 Operation and Maintenance Measures

This section contains mitigation measures to be implemented during operation of the Project. These measures generally require monitoring of system operations over time and the modification of those operations to reduce adverse environmental impacts. However, no Operation and Maintenance Measures apply to the Disinfection and Diversion Improvements nor the modifications to Figure 2-4, therefore Section 3.5 is not included in this Mitigation and Monitoring Program.

Mitigation Measure Format

Table 3.0.1 presents the format for each mitigation measure and the information that each measure will contain.

Program Implementation and Monitoring

Implementation

The City of Santa Rosa shall be responsible for overall implementation and administration of the Mitigation and Monitoring Program. The City may partner with others, such as geysers operators or agricultural water users, who will need to implement the Program as well. The City shall designate a Coordinator to oversee implementation of the mitigation measures and ensure they are completed to the standards specified in the EIR. The Coordinator will also ensure that the mitigation measures are completed in a timely manner and be responsible for preparing and maintaining the Mitigation Monitoring CEQA Checklist.

Duties of the Coordinator include the following:

- Coordinate with applicable agencies that have mitigation monitoring and reporting responsibility;
- Coordinate activities with the construction manager;
- Coordinate activities of all in-field monitors;
- Develop work plan and schedule for monitoring activities;
- Coordinate activities of consultants hired by the City when such expertise and qualifications are necessary;
- Perform routine inspections and reporting activities;
- Perform plan checks;
- Assure follow-up and response to citizen inquiries and complaints;
- Develop, maintain, and compile Verification Report form(s);
- Maintain the Mitigation Monitoring CEQA Checklist or other suitable mitigation compliance summary; and
- Coordinate and assure implementation of corrective actions or enforcement measures, as needed.

TABLE 3.0-1 MITIGATION MEASURE FORMAT

3.X.X Mitigation Measure Title

This is the number and title of the mitigation measure.

Following the mitigation measure title is a description of the Mitigation Measure.

Implementing Agency: The agency or individual that has the responsibility for implementing or performing the measure.

Timing: **Start:** The appropriate time at which the measure is to be implemented.

Complete: The appropriate time at which the measure is to be complete.

Monitoring Agency: The public agency that has the responsibility for monitoring to ensure that the mitigation measure is effective in mitigating the impact.

Validation: The means by which the monitoring agency will verify that the measure has been carried out.

Mitigation Monitoring

The implementation of mitigation measures shall be monitored at two levels. The first level of monitoring is done through the use of a Verification Report. A sample Report is shown as Table 3.0.2. This report is to be completed for each mitigation measure by either the in-field monitor, the responsible agency, or the construction manager (whichever is appropriate for the given action and mitigation measure). Frequency of report completion will vary based on the type of mitigation measure. For example, measures that require modification of final design drawings will only require that the Verification Report be completed at the time the final drawings are completed and again when they are approved. However, in-field monitoring for activities such as pipeline construction through a stream may require that a Verification Report be completed daily.

Once a mitigation measure has been completed and the measure needs no further monitoring or follow-up, the pertinent in-field monitor, responsible agency, or construction manager shall notify the Coordinator that the measure has been completed. The Coordinator shall be responsible for collecting and maintaining completed Verification Reports.

~~If the~~ Upon determining that a measure has not been complied with, the pertinent in-field monitor, responsible agency, or construction manager ~~determines that non-compliance has occurred, shall deliver~~ a written notice ~~shall be delivered~~ to the Coordinator describing the non-compliance and requiring steps being taken to achieve compliance within a specified period of time. If non-compliance still exists at the expiration of the specified period of time, construction may be halted and fines may be imposed upon the party responsible for implementation, at the discretion of the City.

The second level of monitoring shall be done through the completion of an annual ~~the~~ Mitigation Monitoring ~~CEQA Checklist Program Summary~~. The purpose ~~of the CEQA Checklist~~ is to provide a summary of the status of all adopted mitigation measures. ~~The Coordinator shall update the CEQA Checklist quarterly (four times a year). The Coordinator shall update the CEQA Checklist quarterly (four times a year).~~ The Coordinator shall ~~update~~ create the ~~Checklist summary~~ by reviewing all of the Verification Reports and contacting all of the in-field monitors, responsible agencies, and the construction manager to review the status of their respective mitigation measures. The summary shall be prepared at the completion of construction or annually if the construction extends more than one year.

Mitigation Monitoring Status Reporting

The City ~~shall~~ may compile a Mitigation Monitoring Status Report on an annual basis when any the following conditions occur: construction; revegetation or compensatory habitat creation during the five-year monitoring period; first year of operation. ~~The Report shall be presented~~

~~and discussed at a meeting of the Board of Utilities. The meeting shall be noticed in local newspapers and shall be open to the public.~~ The report shall contain the following:

- Mitigation Monitoring CEQA Checklist to provide the status of every mitigation measure;
- List of completed mitigation measures;
- List of non-compliance incidences, with action taken or required;
- Evaluation of the effectiveness of the mitigation measures;
- Recommendations to improve mitigation effectiveness; and
- Required modifications to the Mitigation and Monitoring Program to comply with legislation and policies adopted in the previous year (e.g. newly listed threatened species).

TABLE 3.0-2 VERIFICATION REPORT

Date: _____

Compliance: Acceptable Unacceptable

Location: _____ Construction Sheet No: _____	Mitigation Measure: _____ Discipline: <input type="checkbox"/> Land Use/Ag <input type="checkbox"/> Public Health/Serv <input type="checkbox"/> Geology <input type="checkbox"/> Noise/Air <input type="checkbox"/> Water <input type="checkbox"/> Transportation <input type="checkbox"/> Biology <input type="checkbox"/> Cultural
Activity: _____	
Observations: _____	
Recommendations: _____	
By: _____	Approved By: _____
Copies to: _____	
Anticipated Completion Date: _____	
Method of Compliance: _____	
Date Closed: _____	Authorized By: _____

3.1 COMPLIANCE WITH EXISTING PROGRAMS

This section presents the applicable federal, state, regional, county, and local laws, policies and regulations with which the IRWP Project may need to comply.

Federal

- Archaeological and Historic Data Preservation Act of 1974, as amended
- Federal Water Pollution Control Act, ~~as amended by~~ now known as the Clean Water Act ~~of 1977~~, Section 404, as amended
- Code of Federal Regulations, Title 40 Parts 6, 51, and 93
- Federal Antiquities Act of 1906, as amended
- Federal Clean Air Act of 1970, ~~amended 1977 and 1990~~ as amended
- Federal Endangered Species Act of 1973, as amended
- Mining Law of 1872, as amended ~~1988~~
- National Historic Preservation Act of 1972, Sections 106 and 110, as amended
- National Natural Landmarks Program, Historic Sites Act of 1935, as amended
- Rivers and Harbors Act of 1899, Section 10, as amended
- Surface Mining Control and Reclamation Act of 1977, as amended

State

- California Environmental Quality Act
- California Endangered Species Act
- California Clean Air Act
- California Occupational Safety and Health Administration (Cal-OSHA)
- California Department of Fish and Game Code Section 1601-1603
- ~~California Department of Fish and Game Wildlife/Hardwood Management Guidelines (Revised 1994)~~
- California Health and Safety Code, Section 25500 et seq. - Hazardous Materials Release Response Plans and Inventory
- California Streets and Highways Code, Section 660, California Department of Transportation requirements for encroachment permits for work conducted on State highways
- Geothermal Steam Act ~~of 1970~~, as amended
- Native Plant Protection Act (Fish and Game Code Section 1900-1913)
- Public Resources Code, Sections 5097.5 and 30244
- Public Resources Code, Sections 5020-5024 (California Register of Historic Places)
- Public Resources Code, Section 6301 et seq.
- Public Resources Code, Section 6501 et seq.
- Title 8, California Code of Regulations, Section 1539 - 1541.1 - Excavations
- Title 8, California Code of Regulations, Sections 1509 & 3203 - Injury and Illness Prevention Program

- Title 8, California Code of Regulations, Sections 1597 - 1599 - Vehicles, Traffic Control, Flaggers, Barricades, and Warning Signs
- Title 8, California Code of Regulations, Section 5194 - Hazard Communication
- Title 22, California Code of Regulations, Section ~~60301 et seq.~~ Reclaimed Water 60300 Water Recycling Criteria
- Title 22, California Code of Regulations, Section 66260.1 et seq. - California Hazardous Waste Regulations

Regional

- Bay Area Clean Air Plan
- Bay Area Air Quality Management District Risk Management Policy
- Bay Area Air Quality Management District Rules and Regulations
- Lake County Air Quality Management District Rules and Regulations
- Northern Sonoma Air Pollution Control District Rules and Regulations
- Central Valley Regional Water Quality Control Board Basin Plan
- North Coast Regional Water Quality Control Board Basin Plan
- San Francisco Bay Regional Water Quality Control Board Basin Plan
- NPDES No. CA0025054, NPDES Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems

County and City

Sonoma County

- Sonoma County Aggregate Resource Management Plan
- Sonoma County General Plan
- Sonoma County Airport Land Use Plan
- Sonoma County Regional Climate Action Plan Climate Action 2020 and Beyond
- Sonoma County Heritage or Landmark Tree Ordinance ~~(No. 4014)~~
- Sonoma County Vineyard Erosion and Sediment Control Ordinance (N. 5216)
- Sonoma County Zoning Ordinance
- Sonoma County Building Codes

Lake County

- Lake County Countywide Plan
- Lake County Zoning Ordinance
- Lake County Building Codes

City of Santa Rosa

- Building and Grading Regulations
- Santa Rosa City Code: Historic and Cultural Preservation
- Santa Rosa General Plan
- Santa Rosa Zoning Ordinance

- Santa Rosa Heritage Tree Ordinance
- Community-wide Climate Action Plan
- Municipal Climate Action Plan

City of Sebastopol

- Building and Grading Regulations
- Sebastopol General Plan
- Sebastopol Zoning Ordinance

City of Rohnert Park

- Building and Grading Regulations
- Rohnert Park General Plan
- Rohnert Park Zoning Ordinance

City of Sebastopol

- Building and Grading Regulations
- Sebastopol General Plan
- Sebastopol Zoning Ordinance

City of Cotati

- Building and Grading Regulations
- Cotati General Plan
- Cotati Zoning Ordinance

Town of Windsor

- Building and Grading Regulations
- Windsor General Plan
- Windsor General Plan
- Tree Preservation and Protection Ordinance

City of Healdsburg

- Building and Grading Regulations
- Healdsburg General Plan
- Healdsburg Zoning Ordinance
- Healdsburg Heritage Tree Protection Ordinance

City of Cloverdale

- Building and Grading Regulations
- Cloverdale General Plan
- Cloverdale Zoning Ordinance

3.2 MEASURES INCLUDED IN THE PROJECT

This section presents a listing and description of measures and standards applicable to the Disinfection and Diversion Improvements carried out by the City of Santa Rosa that have been incorporated into the IRWP Program Project Description. Project Measures 3.2.1, 3.2.4, 3.2.7, 3.2.8, 3.2.11, 3.2.12, 3.2.13, 3.2.14, 3.2.18, 3.2.19, 3.2.21, and 3.2.22 from the IRWP Certified EIR do not apply to the project and have been removed. In addition, Project Measures 3.2.5 and 3.2.6 have already been completed and therefore are not included here.

3.2.2 Revegetate Temporarily Disturbed Sites

The City shall revegetate sites disturbed or scarred by construction activities. The Revegetation Program shall include the following, as may be applicable to the site-specific disturbance:

Streams and other Waters of the U.S.

- Restore original contours and drainage patterns.
- Prior to erosive weather events, implement stream bank stabilization measures such as placement of willow wattles at woody crossings and covering disturbed stream banks with a biodegradable fiber (jute) cloth, coconut fiber rolls, or another similar erosion control fabric.
- If the disturbed or scarred site is in a riparian area, collect native seed stock or cuttings near the stream crossing (taking into consideration microclimate and time of year for propagation).
- Avoid use of soil amendments such as lime or fertilizers.
- Spread a cover of straw, rice straw if available, over disturbed soils and work into soil.
- Apply an organically based tackifier on disturbed areas to reduce air and water erosion of soils.

Upland Non-Urban Sites

- Restore pre-project topographic features. In those cases where full restoration is not possible, graded contours shall be rounded to emulate the natural landforms of the adjacent area.
- Use native seed mix and/or drought-tolerant plant species common to the disturbed area.
- Collect seed material of woody and herbaceous plants from the construction corridor and/or adjacent undisturbed vegetation during a suitable season for each group of plants, if feasible. Use potted plant materials to replace woody vegetation (i.e., trees and shrubs).
- Apply dried seed material collected as specified earlier evenly to the finish-graded topsoil surface.

Urban Sites

- Restore pre-project topographic features. In those cases where full restoration is not possible, graded contours shall be rounded to emulate the natural landforms of the adjacent area.
- Use species comparable to those removed from the disturbed area.

Top Soil

Where revegetation will occur, the first six inches of topsoil shall be stripped from areas to be occupied by structures, and areas to be excavated, graded, or filled. The stripped topsoil shall be stockpiled on-site, in designated areas and not mixed. Topsoil shall be stockpiled free from vegetation, trash, large stones, and other extraneous materials, to the extent possible. Stockpiled topsoil shall be protected from disturbance, rainfall, and erosion until it can be placed as final grade or otherwise reused.

Planting Density and Survival Rate

Plants shall be installed, maintained and replaced such that 120 percent of the design plant density is present on the five-year anniversary of plant installation.

Monitoring

Plant survival shall be monitored and summarized in an annual report. Annual reports shall include recommendations to be implemented to remediate the previous year's failures including replacement planting.

Implementing Agency:	City of Santa Rosa
Timing:	Start: Following completion of construction Complete: Revegetation will be completed within one year of completion of construction. Monitoring will continue for five years.
Monitoring Agency:	City of Santa Rosa
Validation:	Review annual reports beginning with end of first growing season following construction. Conduct field monitoring on yearly basis or as deemed appropriate. Review annual reports and conduct monitoring annually for five years.

3.2.3 Storm Water Pollution Prevention Plan

The City of Santa Rosa shall prepare, or have prepared, a site-specific Storm Water Pollution Prevention Plan for each construction area, and obtain coverage under State Water Resources Control Board for Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities. ~~and~~ If special measures are necessary for a site, these measures shall be incorporated into the Plan. The Plan ~~shall~~ may include the following elements, as applicable:

- Type of construction allowed during the rainy season.
- Method of protection for new cut and fill slopes and soil stockpiles upon completion of permanent or temporary winter slopes.
- Diversion of runoff away from construction areas that have been denuded or otherwise disturbed.
- Retention of sediment on-site by the use of silt fences, hay bales, sedimentation basins, or other structures.
- Inspection and maintenance schedule for erosion and sediment control facilities.
- Reduction of cut and fill along streams through the use of steepened side slopes, retaining walls and extended culverts.
- Cutting vegetation off at ground level, leaving existing root systems intact.
- Implement BMPs as needed to prevent increases in downstream runoff volume.
- Incorporate features (e.g., straw wattles) in temporary stormwater conveyance features to reduce the velocity of stormwater run-off from the construction site to pre-construction levels as a means of preventing off-site erosion.

Implementing Agency: City of Santa Rosa

Timing: **Start:** During the Project design phase.

Complete: At the end of construction.

Monitoring Agency: City of Santa Rosa

Validation: The City of Santa Rosa shall monitor compliance with the Plan throughout construction.

3.2.9 Protect Creeks from Toxic Discharge

During construction, the City of Santa Rosa shall follow pertinent paragraphs of the Caltrans Manual, California Standard Specifications (Caltrans ~~1992~~2018), including Section 13-1, which includes general specifications for preventing, controlling, and abating water pollution within waters of the State. Section 7-1.01G which begins, "The contractor will exercise every reasonable precaution to protect streams from pollution with fuels, oils, bitumens, calcium chloride, and other harmful materials." Measures shall include:

- Construction byproducts and pollutants such as oil, cement, and washwater shall be prevented from discharging into streams and shall be collected and transported to a landfill authorized to accept hazardous wastes.
- No construction vehicles or equipment may be parked within the upland riparian corridor of any stream channel.
- Mobile equipment shall not be refueled or serviced within the riparian corridor.
- Construction material storage areas containing hazardous or potentially toxic materials shall be bermed to prevent the discharge of pollutants to runoff water. These materials shall be stored under cover.
- Utilize good housekeeping practices, safer alternative products where feasible, and employee training programs to prevent or reduce the discharge of pollutants to runoff water from construction activities.
- Construction vehicles and equipment shall be maintained to prevent contamination of soil (from leaking hydraulic fluid, fuel, oil, and grease). Any restrictions on lubricants shall not include lubricants used for tunnel construction which will be permanently encased or isolated from the stream after construction is complete.
- Concrete washout areas shall be designated. Wash-out of concrete vehicles and equipment shall be restricted to designated areas only.
- If dewatering is required, a temporary facility shall be used to reduce the turbidity of the dewatering water prior to discharge back into the river. The temporary facility shall include a portable sedimentation tank to provide initial settling of sediments to produce dewatering water than can be discharged to land or to the creek without water quality violations. Dewatering for improvements implemented under the Laguna Plant Upgrade component may be pumped to the treatment facility at the discretion of the plant operations supervisor.

Implementing Agency: City of Santa Rosa

Timing: **Start:** At the start of construction.

Complete: At the completion of construction.

Monitoring Agency: City of Santa Rosa

Validation:

The City of Santa Rosa shall monitor compliance on a schedule consistent with the intensity of construction and the presence of creeks.

3.2.10 Update Existing Hazardous Materials Management Plan and Prepare Additional Plan(s) as Needed

The City of Santa Rosa shall amend the Laguna Treatment Plant's existing Hazardous Materials Management Plan (HMMP) ~~to reflect~~ if increased hypochlorite is used ~~usage~~. In addition, the City shall prepare a new HMMP for each off-site facility that uses hypochlorite.

Implementing Agency: City of Santa Rosa

Timing: **Start:** Prior to operation of the proposed Project.

Complete: The HMMP shall be updated annually to reflect average annual use of hypochlorite.

Monitoring Agency: City of Santa Rosa

Validation: The Fire Department shall review the amended HMMP prior to operation of the proposed Project. Reviews shall be conducted annually, thereafter.

3.2.15 Standard Traffic Control Procedures

The City of Santa Rosa shall adopt standard traffic control measures to minimize traffic congestion, traffic hazards, and damage to roads to the extent feasible. Construction flagging and signage, use of plates, and other safety measures shall be in conformance with Caltrans ~~“Manual of Traffic Controls for Construction and Maintenance of Work Zones” (Caltrans 1990)~~ “Manual on Uniform Traffic Control Devices (Caltrans 2014). Other measures shall include:

Encroachment Permits

Obtain all necessary Encroachment and Transportation Permits from the appropriate agencies. The City of Santa Rosa shall consult with the County of Sonoma Department of Transportation and Public Works (DTPW) staff and other affected agencies regarding site-specific details of construction prior to the preliminary design stage.

Emergency Response, Transit and School Bus Routes

- If temporary lane or road closures are required, the City shall contact emergency response (hospitals, police, fire, and ambulance), transit, and school bus providers and inventory the locations of their primary routes that may be affected by the construction.
- Where construction necessitates lane or road closures along emergency response routes, the City shall recommend and obtain approval of alternate routes or other means from the affected service providers, at a minimum of one week prior to construction.
- During construction, the City shall notify the service providers on a weekly basis of the timing, location, and duration of construction activities.

Lane and Road Closures

- Consistent with construction requirements, the minimum number of through traffic lanes shall be closed and the duration of such closures shall be minimized. Where construction requires closure of the road, temporary bypass roads may be built within the construction right-of-way allowing temporary access.
- Where temporary road closure is necessary, a temporary road closure plan shall be developed by the construction manager and submitted to, and approved by, the Traffic Engineer of the affected jurisdiction. The temporary road closure plan shall include alternate detour routing and notification of local fire and police departments and emergency service, transit and school bus providers
- Pipelines crossing major freeways shall utilize tunneling methods so as not to disrupt the flow of traffic and commerce.

Access to Businesses and Residences

- The City shall provide public facilities, businesses, and residences within 500 feet of the construction zone with a notification packet that describes the construction activities scheduled for their neighborhood.
- The City shall maintain pedestrian and vehicular access to public facilities, businesses, and residences along the route during commute hours, and shall minimize the closure of pedestrian and vehicular access at other times. Peak commute hours are between 7:00 a.m. and 9:00 a.m. in the morning and 4:00 p.m. and 6:00 p.m. in the evening.

Repair Road Damage

- Prior to construction, the City shall prepare a summary of baseline conditions for roads scheduled to have construction on or adjacent to them. The survey shall identify road name, length, and width; surface type and condition; and shoulder surface type and condition.
- Within one year of completion of construction, roads damaged by construction traffic or pipeline construction shall be repaired to a condition equal to or better than that existing prior to the construction activity.

Park within Construction Easements

The City shall establish construction staging areas. Construction worker vehicles, construction equipment not in use, and stored materials shall be kept within the staging area. Designated areas within the construction easements shall be designed to accommodate all construction-related activity, and the designated areas shall be maintained for parking throughout the duration of the construction.

Implementing Agency:	City of Santa Rosa
Timing:	Start: During construction Complete: Implementation shall continue throughout construction.
Monitoring Agency:	City of Santa Rosa
Validation:	The City shall comply with this measure prior to starting construction near the affected roadway

3.2.16 Dust Control Program

The City of Santa Rosa shall reduce dust generation during construction, as recommended by the California Air Resources Board, Bay Area Air Quality Management District, Northern Sonoma County Air Pollution Control District, and or the Lake County Air Quality Management District, as applicable. Measures that the construction contractor shall implement include the following:

Basic Dust Control Program

The construction contractor shall implement the following dust control measures during all construction phases:

- Water active construction areas at least twice daily and more often during windy periods. Active areas adjacent to residences should be kept damp at all times.
- Cover hauling trucks or maintain at least two feet of freeboard. Dust-proof chutes shall be used as appropriate to load debris onto trucks during demolition.
- Pave, apply water at least twice daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas.
- Sweep daily (with water sweepers) paved access roads, parking areas, and staging areas and sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously-graded areas that are inactive for 10 days or more).
- Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles.
- Limit traffic speeds on any unpaved roads to 15 mph.
- Replant vegetation in disturbed areas as quickly as possible.

Enhanced Dust Control Program

The construction contractor shall implement the following measures for construction sites larger than 4 acres in size, within 100 feet of sensitive receptors such as residences, or where more than 3 pieces of heavy-duty construction equipment are operating simultaneously:

- At off-road construction sites, install wheel washers for exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.
- If necessary, install windbreaks, at the windward side(s) of construction areas to prevent blowing dust from impacting sensitive receptors or causing a nuisance.
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 20 ~~25~~ mph and visible dust emissions cannot be prevented from leaving the construction site(s).

- Limit areas subject to disturbance during excavation, grading, and other construction activity at any one time.
- Prior to disturbance (or removal) of materials suspected to contain asbestos, lead or other toxic air contaminants, contact the BAAQMD's, or Northern Sonoma County APCD's, or Lake County AQMD's Enforcement Division.

Implementing Agency: City of Santa Rosa

Timing: **Start:** With initiation of construction

Complete: At the completion of construction.

Monitoring Agency: City of Santa Rosa

Validation: Annual reports during construction.

3.2.17 Equipment Exhaust Control Program

The City of Santa Rosa shall implement the following equipment emissions control programs for construction larger than 4 acres in size, within 100 feet of sensitive receptors such as residences, or where more than 3 pieces of heavy-duty construction equipment are operating simultaneously. Measures shall include:

- Limit idling time either by shutting equipment off when not in use or reducing the maximum idling time to no more than 5 minutes as required by the California Code of Regulations Title 13, Section 2485.
- ~~Reduce unnecessary idling of construction equipment and~~ Avoid staging equipment within 200 feet of sensitive receptors.
- Where possible, use newer, cleaner burning ~~diesel~~-fueled construction equipment.
- Where diesel-fueled construction equipment is used, require contractors to use equipment that meets the California Air Resources Board's most recent certification standard for off-road heavy duty diesel engines.
- Properly maintain construction equipment in accordance with manufacturer's specifications.
- Designate a Disturbance Coordinator responsible for ensuring that mitigation measures to reduce air quality impacts from construction are properly implemented.

Implementing Agency:	City of Santa Rosa
Timing:	Start: With initiation of construction Complete: At the completion of construction.
Monitoring Agency:	City of Santa Rosa
Validation:	Annual reports during construction.

3.2.20 Control of Light and Glare

The City shall specify installation of shielded low-intensity outdoor lighting at all pump stations, storage, tanks, discharge, Advanced Membrane Treatment facilities, and similar facilities, and shall also install controls which will provide for non-continuous operation of the lighting. Lighting at these facilities shall be turned on only on an “as needed” basis while monitoring and maintenance is being performed and when access to the building is necessary.

Implementing Agency: City of Santa Rosa

Timing: **Start:** At the beginning of design

Complete: Throughout the life of the Project or until operation of a facility ceases.

Monitoring Agency: City of Santa Rosa Public Utilities

Validation: Report confirming that 90% design plans and/or specifications conform with measure.

3.3 PLANNING MEASURES

This section contains mitigation measures applicable to the Disinfection and Diversion Improvements and to be implemented during the planning and design phase of the Project. These measures often require the refinement of the final design to accommodate particular environmental constraints. Mitigation Measures 3.3.1 to 3.3.16 and 3.3.18 from the IRWP Certified EIR do not apply to the project and therefore are not included here.

3.3.17 Identification, Evaluation, and Avoidance of Cultural and Paleontological Resources

The City of Santa Rosa shall avoid impacts to cultural resources, to the extent feasible. The treatment of cultural resources to be affected by the Program shall be addressed under applicable cultural resource laws and regulations. Consultation to address potential adverse effects to cultural resources may involve interested parties, and any additional state or federal agencies which assert jurisdiction over the project.

If the project is federally regulated, a Memorandum of Agreement (MOA) among regulatory agencies and the City of Santa Rosa may be submitted to the State Historic Preservation Officer (SHPO). This MOA would set out specific steps for avoiding or reducing impacts to cultural resources which have been determined eligible for listing on the National Register of Historic Places or the California Register of Historical Resources or are otherwise protected. The MOA may provide for a phased resource identification, evaluation, and data recovery program. The MOA should include measures for impact avoidance, minimizing impacts when avoidance is not feasible, and compensating for unavoidable impacts. The City shall comply with Section 7050.5 of the California Health and Safety Code should human remains be encountered during project activities. Measures to minimize impacts may include:

- Designing project actions to conform with the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings*;
- Conducting archaeological data recovery in accordance with a research design approved by the relevant regulatory agencies;
- Consulting with regulatory agencies and descendant communities to ensure that any human remains that may be affected by project activities are treated appropriately; and
- Consulting with regulatory agencies and associated communities to ensure the appropriate treatment of any Traditional Cultural Properties which may be impacted by the project; and
- Monitoring culturally sensitive areas.

If the project is not subject to federal regulation, an MOA will not be prepared.

A four-step process will be implemented to address these potential impacts and the requirements of the cultural resource laws and regulations. Once the final Area of Potential Effects (APE) for the preferred alternative is selected, the first step will be identification of cultural resources within the APE. The second step will require that these resources be evaluated under the significance criteria presented in the IRWP EIR Table 4.13.2. If the resources are significant, the third step will be to determine whether they will be affected by the proposed project. Finally, the fourth step will involve avoidance or mitigation of any adverse effects to significant resources. If significant paleontological resources are identified during construction, a qualified paleontologist shall recover the resources and provide for their proper curation.

Implementing Agency: City of Santa Rosa

Timing: **Start:** At onset of design.
Complete: Before commencement of Project construction.

Monitoring Agency: City of Santa Rosa

Validation: Section 106 approval, or completion of recovery if no Section 106 is required, prior to construction.

3.4 CONSTRUCTION MEASURES

This section contains mitigation measures applicable to the Disinfection and Diversion Improvements and to be implemented prior to, during, and immediately following construction. These measures generally require certain constraints during construction and repair and rehabilitation of impacts resulting from construction. Mitigation Measures 3.4.2 and 3.4.4 from the IRWP Certified EIR do not apply to the project and therefore are not included here.

3.4.1 Protect Active ~~Raptor~~ Bird Nests

The City of Santa Rosa shall avoid loss of active ~~raptor~~ bird nests.

Preconstruction surveys shall be conducted by a qualified biologist no more than 30 days prior to the initiation of project activities including but not limited to tree trimming, grading, and excavation. During the preconstruction surveys a qualified wildlife biologist shall locate and map active nests on the project site or within ~~150 meters (500 feet)~~ of the site for raptors, and 300 feet for other nesting birds. Preconstruction surveys shall be conducted in all suitable habitats ~~within 150 meters~~ of the site during the nesting season (February – August).

If active ~~raptor~~ nests are located within a project site, measures to avoid impacts may include one or more of the following, depending upon site-specific conditions:

- Construction activities may need to be delayed until the end of the nesting season or until the young have fledged. A qualified biologist would monitor the nest to determine when the young have fledged.
- If active nests are observed within 300 to 150 meters (500 feet) of the project site, exclusion zones may be designated as described herein. No construction activities would be allowed within the exclusion zone until the following conditions have been met: a) the young have fledged from the nest, b) the birds abandon the nest on their own, c) the nest fails and the birds do not re-nest. A qualified biologist would determine if and when these conditions are met. Exclusion zones may be established as follows:
 - Nests Located along Public Road Shoulders. An exclusion zone of ~~30 meters (100 feet)~~ around nest trees located along public roads within or immediately adjacent to the construction corridor. The exclusion zone would be established using orange construction fencing.
 - Nests Located in Open Country. Exclusion zones extending at least ~~60 meters (200 feet)~~ from the nest tree around any active ~~raptor~~ nest in open country. Only the portion of the exclusion zone that intersects the project site would be fenced using orange construction fencing.
 - Golden Eagle Nests. Active nests identified as belonging to golden eagles need larger exclusion zone due to the sensitivity of this species to disturbance at the nest. For active golden eagle nests, the exclusion zone would be line of sight from the nest or ~~400 meters (0.25 miles)~~, whichever is less.
 - Northern Spotted Owl Nests. If a spotted owl is found to be actively nesting within or along the alignment, activity may need to be prevented within ~~400 meters (0.25 mile)~~ of the nest. If northern spotted owls are observed during the pre-construction surveys, the U.S. Fish and Wildlife Service (USFWS) would need to be contacted immediately regarding specific measures to avoid impacts to the nest.

Implementing Agency: City of Santa Rosa

Timing: **Start:** ~~30~~14 days prior to the start of construction, during each construction year.

Complete: Monitoring shall be complete when the last young raptor has fledged, during each construction year.

Monitoring Agency: City of Santa Rosa

Validation: During the breeding season of each construction year, reports shall be submitted to the California Department of Fish and Wildlife Game and the City of Santa Rosa.

3.4.3 Construction Noise Control Measures

The City of Santa Rosa shall ensure that noise disturbances at sensitive receptors during construction activities are reduced per the applicable jurisdiction's noise ordinance, to the extent feasible. Measures may include:

- Newer equipment with improved noise muffling may need to be used and manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators be intact and operational.
- Construction equipment may require weekly inspection to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).
- Wherever possible hydraulic tools may be used instead of pneumatic impact tools.
- Construction activities after 7:00 p.m. or before 7:00 a.m. may need to be restricted near residential units, hotels, hospitals, or convalescent homes. Noise-generating construction may also require restriction on Saturdays, Sundays, and holidays.
- Heavy truck trips may need to be routed over streets that will cause the least noise disturbance to residences or businesses in the vicinity of the Project site.
- Construction staging areas, maintenance yards, and other construction oriented operations may need to be located more than 1,600 feet from a sensitive receptor.
- Sensitive noise receptors may be specifically identified and notified in advance to keep windows and doors closed during peak construction activity. Sensitive noise receptors may be notified when blasting or pile driving will be conducted and instructed as to actions necessary to reduce noise impacts.
- Where construction would occur within 1,600 feet of schools, the construction manager may need to implement measures to insure that construction noise does not interfere with the learning activity of the students. The following noise control measures may be implemented:
 - Limit construction to non-school hours or weekends.
 - Utilize temporary noise barriers, as needed, to protect schools from excessive noise levels from construction activities. Noise barriers may be made of heavy plywood, loaded vinyl acoustical curtain (Sound Transmission Coefficient rating of 25 or better), or natural and temporary earth berms.
 - A qualified noise control engineer may design the temporary construction noise barriers used.
 - A qualified noise control engineer may monitor the temporary construction barriers used, to ensure that any gaps or inadequate materials do not increase noise impact by channeling, or fail to result in any noise mitigation.
- The City may need to offer temporary alternative lodging for the affected occupants during the period of construction, for residences located adjacent to construction areas

where nighttime construction (between 7 p.m. and 7 a.m.) would occur and the occupants would be affected by significant noise levels (as defined in Section 4.11) or unshielded light sources that are construction-related. The City may elect to provide vouchers to the occupants for their use in obtaining lodging or may provide occupants with lodging designated by and paid for directly by the City.

- Limit the size of the explosive charge such that the scaled distance is 60 ft/lb² or greater. This is accomplished by using millisecond delays and multiple charges where scaled distances would otherwise be less than 60 ft/lb².
- Limit blasting to daylight hours.
- Use adequate depth of overburden and proper stemming to minimize blast overpressures.
- For drilling, operation, and maintenance of injection wells: locate wells more than ½ mile from residential areas; use diffusers, water injection, blooie silencer, or rock muffler to attenuate steam venting noise; muffle open bleed lines; use quilted noise control blankets around drill rigs.

Implementing Agency: City of Santa Rosa

Timing: **Start:** During Construction

Complete: At the completion of construction.

Monitoring Agency: City of Santa Rosa

Validation: The City shall respond to complaints from private citizens regarding construction noise within 24 hours. Construction noise shall be monitored at the nearest noise-sensitive receptor location(s) outside the Project boundaries, during high noise generating activity to determine compliance with local noise criteria. Blasting noise shall be monitored for all blasts. If monitoring indicates that construction noise is in excess of applicable standards, the City may consider implementing additional measures to abate noise.

4. 2020 ADDENDUM TO PROGRAM EIR FOR LAGUNA PLANT UPGRADE IMPROVEMENTS

This chapter identifies the potential environmental impacts associated with installation of flow diversion facilities, a new electrical load center, a modified stormwater collection system, and clarifications made to Figure 2-4, Laguna Plant Upgrade, of the IRWP EIR, and changed conditions, and evaluates if the revisions would cause new significant impacts or substantially more severe impacts relative to the impacts previously identified in the IRWP Certified EIR. The purpose of the analysis is to determine whether an Addendum is the appropriate level of CEQA document for the improvements, or if a subsequent or supplemental EIR or negative declaration is needed, as directed by CEQA. This Addendum should be read together with the full text of the IRWP Certified EIR. The evaluation is provided at a program level of detail.

As noted in Chapter 1, replacement of the existing ultraviolet (UV) disinfection facilities is already included in the Laguna Plant Upgrade component of IRWP and evaluated in the Certified IRWP Program EIR, and therefore not included in the Addendum portion of this document.

METHOD OF PRESENTING ANALYSIS RESULTS

This Addendum describes the potential environmental impacts associated with four elements (flow diversion facilities, an electrical load center, a modified stormwater collection system, and clarification of Figure 2-4) for each evaluation criteria established in the IRWP Certified EIR. The evaluation criteria and significance thresholds set forth in the IRWP Certified EIR are provided in the tables at the beginning of each section. Additionally, the Evaluation Criteria with Significance Thresholds tables in the subsections below are numbered identically to the table numbering used in the IRWP Certified EIR. In other words, Table 4.1.2, Evaluation Criteria with Significance Thresholds – Land Use, is the same in number, title, and content as Table 4.1.2 in the IRWP Certified EIR. Similarly, impact numbers referenced in the text of this document align with the impact numbers in the IRWP Certified EIR.

Following each table is a discussion of each element's impact, its level of significance, the basis for the significance conclusion, and a statement as to whether the impact is new or substantially more severe than identified in the IRWP Certified EIR.

UPDATES OF INFORMATION

Relevant information that has been identified or developed since August 2007 (approval of the 2007 revisions to the Recycled Water Master Plan) is provided below. This information will be used to evaluate the flow diversion facilities, electrical load center, modified stormwater collection system, and modification of Figure 2-4 in the environmental analysis sections that follow.

Biological Resources

No change to the California or federal Endangered Species Act listed species that applies to the Laguna Plant Upgrade component of the IRWP Program has been identified since the August 2007 Addendum was prepared and the 2007 revisions to the Master Plan were approved, (Vollmar Natural Lands Consulting 2020; CNDDDB 2020). In 2020, a habitat assessment for California tiger salamander and special-status plants was prepared specific to the Laguna Treatment Plant site. The results of this habitat assessment are more specific than, but consistent with, the evaluation of these resources in the IRWP EIR.

Sensitive Receptors and Visual Resources

The residences along Meadow Lane have been demolished since the IRWP Certified EIR was prepared.

Regulations

The federal, state and local regulations were checked for changes or amendments since preparation of the August 2007 Addendum. This information was obtained from the internet. Regulations applicable to the IRWP Program have been updated in Section 3.1, Compliance and Existing Programs, and in Section 3.2, Measures Included in the Project. This includes revisions to the California Streets and Highways Code, California Code of Regulations Title 22, NPDES Permit and Waste Discharge Requirements, USFWS guidance regarding California tiger salamander and rare plant species, and a variety of state-issued manuals and guidance documents.

SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES

Those impacts and mitigation measure applicable to the proposed facilities, are discussed in each respective resource category in the following technical sections. No new significant impacts have been identified as a result of this Addendum, and therefore no new mitigation measures have been developed. Impacts fall into four categories:

- No impact.
- Less than significant impact.
- Less than Significant after Mitigation – Impact is significant before mitigation, but can be mitigated to a less-than-significant level with the incurrence of mitigation.
- Significant and Unavoidable – Impact is significant before mitigation, and no feasible mitigation has been identified to reduce the impact to a level that is less than significant.

4.1 LAND USE

Table 4.1-2 from the 2004 Certified EIR, shown below, presents Land Use evaluation criteria and significance thresholds for determining impacts. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.1-2 Evaluation Criteria with Significance Thresholds – Land Use

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP be inconsistent with the policies of the Land Use Element or land use plan map of an adopted General Plan, or with adopted zoning regulations?	Acres of land	Greater than 0 acres of land	Land Use Element and land use plan map of the General Plans of Sonoma and Lake counties; cities of Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol and Santa Rosa; and Town of Windsor. Zoning regulations of Sonoma and Lake counties; cities of Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol, and Santa Rosa; and Town of Windsor CEQA Guidelines Appendix G, CEQA Checklist Item IX (b).
2. Will the Project physically divide an established community?	Physical barrier to movement within the community	Any such barrier	CEQA Guidelines Appendix G, CEQA Checklist Item IX (a).
3. Will the IRWP introduce inappropriate uses in a Community Separator?	Acres of land within Community Separators developed in inappropriate uses	Greater than 0 acres of land	Sonoma County General Plan, Land Use Element, Objective LU-5.1 Santa Rosa General Plan, Land Use Element, Objective LUS-1c Land Use and Growth Management Element
4. Will the IRWP increase the potential for conflict as a result of incompatible land uses?	Lineal feet of incompatible uses	Greater than 0 lineal feet.	Professional Judgment
5. Will the IRWP convert non-urban land to urban uses for IRWP facilities?	Acres of land converted	Greater than 0 acres of land	Professional Judgment
6. Will the IRWP convert public open space for IRWP facilities?	Acres of land not in accordance with restrictions on open space use	Greater than 0 acres of land	Professional Judgment

LAGUNA PLANT UPGRADE COMPONENT

The proposed facilities (flow diversion facilities, electrical load center, and modified stormwater collection system) would be located within the boundaries of the existing Laguna Treatment Plant as identified in the IRWP Certified EIR. The new facilities would be similar to existing facilities found throughout the Laguna Treatment Plant. These proposed facilities would not result in changes to land use, a barrier within a community, incompatible uses, or loss of open space, as the new facilities would be contained within the existing boundaries of the Laguna Treatment Plant. There would be no land use impacts from these new facilities, nor from changes to Figure 2-4 which simply provide clarifications to what was analyzed in the IRWP Certified EIR.

For Impacts 1.1.1 through 1.1.6. (referred to as 1 through 6, respectively, in Table 4.1-2, above), the changes to the Laguna Plant Upgrade component and clarification of Figure 2-4 would not have significant impacts on Land Use. Therefore, the proposed changes, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Land Use.

4.2 AGRICULTURE

Table 4.2-3 from the 2004 Certified EIR, shown below, presents evaluation criteria and significant thresholds for determining Agricultural impacts. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.2-3 Evaluation Criteria with Significance Thresholds – Agriculture

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP cause loss of Farmland?	Acres of status farmland ¹ lost	Greater than 0 acres	CEQA Guidelines Appendix G, CEQA Checklist Item II (a)
2. Will the IRWP cause conflict with Williamson Act contracts?	Acres of land that will be removed from Williamson Act contracts as a result of the IRWP.	Greater than 0 acres	CEQA Guidelines Appendix G, CEQA Checklist Item II (b)2 California Land Conservation Act of 196
3. Will the IRWP reduce agricultural soil productivity due to erosion of topsoil from application of recycled water?	Acres of erodible soils irrigated by recycled water and not subject to erosion control plans under the Sonoma County Vineyard Erosion and Sediment Control Ordinance or the California Forest Practice Rules.	Greater than 0 acres	CEQA Guidelines Appendix G, CEQA Checklist Item II (c) 3 Sonoma County Vineyard Erosion and Sediment Control Ordinance. California Forest Practice Rules (California Department of Forestry and Fire Protection 2003)
4. Will the IRWP reduce agricultural soil productivity due to build-up of trace elements or salinity?	a. Suitability of recycled water for irrigation (pH units, mg/l, or mmhos/cm) b. Metals loading (kilograms/hectare) in soils from application of recycled water and fertilizer/manure	Exceedance of FAO Guidelines Exceedance of state guidelines or federal rules	CEQA Guidelines Appendix G, CEQA Checklist Item II (c) 3 United Nations Food and Agricultural Organization (FAO) Irrigation Water Guidelines (FAO, 1994) Government of Canada, Prairie Farm Rehabilitation Administration, Irrigation and Salinity (Canada 2000) CEQA Guidelines Appendix G, CEQA Checklist Item II (c) 3 State Water Resources Control Board Report #84-1 (Pettygrove G.S. and Asano, T. 1996) EPA 503 Rules for applications of sludge

Table 4.2-3 Evaluation Criteria with Significance Thresholds – Agriculture

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
5. Will the IRWP result in the conversion of timberlands to non-timber uses?	Acres of timberland converted to non-timber use without approval of a Timberland Conversion Permit or an Exemption	Greater than 0 acres	CEQA Guidelines Appendix G, CEQA Checklist Item II (c) 3 California Timber Practice Act, (Z'berg-Nejedly Forest Practice Act), Division 4, Chapter 8, Public Resources Code
6. Will the IRWP cause damage to adjacent vineyards by increasing glassy-winged sharpshooter populations?	Plants not locally grown or purchased from nurseries with approved inspection programs.	Greater than 0 plants	CEQA Guidelines Appendix G, CEQA Checklist Item II (c) 3 Sonoma County Agricultural Commissioner Sonoma County Viticulture Advisor

LAGUNA PLANT UPGRADE COMPONENT

The analysis presented in the IRWP Program EIR for the Laguna Plant Upgrade component is applicable to the additional facilities and clarifications made to Figure 2-4.

The proposed facilities would be constructed within the existing Laguna Treatment Plant site and do not involve the land application of recycled water. Therefore, these facilities would not cause the loss of agricultural land or land under Williamson Act contracts, would not reduce soil productivity from the use of recycled water, and would not result in the conversion of timberland or increase the population of the glassy-winged sharpshooter. There would be no impacts to agriculture from these new facilities.

Under Impacts 2.1.1 through 2.1.6 (referred to as 1 through 6, respectively, in Table 4.2-3, above), the changes to the Laguna Plant Upgrade component would not have significant impacts on Agriculture. Therefore, the proposed changes, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Agriculture.

4.3 GEOLOGY, SOILS AND SEISMICITY

Table 4.3-7 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining geology, soils, and seismicity impacts. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.3-7 Evaluation Criteria with Significance Thresholds – Geology, Soils, and Seismicity

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP be located within an area of unstable slope conditions?	Geotechnical assessment of landslide risk potential	Location of facilities in area mapped as Mostly Landslide or Many Landslides	The rating takes into consideration the prevalence of mapped landslides in the area. Landslides and other slope failure could occur in areas where landslides are common. Areas with Few Landslides or Flat Land are expected to have stable slope conditions CEQA Guidelines Appendix G, CEQA Checklist Item VI (c).
2. Will the IRWP be subject to ground rupture due to location near a surface trace of an active fault?	Location of facilities within an Alquist-Priolo Earthquake Fault Zone	Any portion of facilities within zone	Earthquake fault zones are established under the Alquist-Priolo Earthquake Fault Zoning Act by the California Division of Mines and Geology (CDMG), now the California Geological Survey (CGS), to regulate development near active faults to mitigate the hazard of surface rupture. The Act applies only to structures for human occupancy but the zones accurately delineate areas at greatest risk for surface fault rupture. CEQA Guidelines Appendix G, CEQA Checklist Item VI (a)(i)
3. Will the IRWP be located in areas with soils and groundwater conditions that are susceptible to liquefaction during an earthquake?	Geotechnical assessment of potential for liquefaction or more detailed mapping, where available	A rating of High for liquefaction for program facilities except irrigation pipes	Certain soil types, especially fine sandy soils, underlain by shallow groundwater, are prone to liquefaction. The Division of Mines and Geology has identified areas where soil properties are highly susceptible to liquefaction (CDMG 1997, Special Publication 117.) Program facilities in these areas would be vulnerable to damage from liquefaction. CEQA Guidelines Appendix G, CEQA Checklist Item VI (c)

Table 4.3-7 Evaluation Criteria with Significance Thresholds – Geology, Soils, and Seismicity

4. Will the IRWP induce seismicity?	Program induced ground shaking intensity	Ground shaking effects of Modified Mercalli intensity V or greater increasing in frequency by 20% or more	Earthquakes that produce ground shaking intensity of Modified Mercalli IV (generally corresponds to a magnitude 3 earthquake within an epicentral distance of several miles) are not generally associated with damage to people or property. CEQA defines damage to people or property as a significant effect
5. Will earthquake-induced strong ground shaking damage IRWP facilities?	Structural and geotechnical design and construction not in conformance with requirements of regulatory agencies and applicable building codes (refer to text).	Construction not in conformance with requirements of the Division of Safety of Dams or applicable building codes.	Uniform Building Code (UBC 1997) as amended locally and Division of Safety of Dams regulations. CEQA Guidelines Appendix G, CEQA Checklist Item VI (a)(ii and iii)
6. Will construction of the IRWP cause off-site water-related erosion?	Construction activities not in compliance with requirements of the program National Pollutant Discharge Elimination System Permit (NPDES), Division of Safety of Dams regulations, or building and grading codes.	Construction not in compliance with NPDES, Division of Safety of Dams, or building and grading codes.	Clean Water Act regulations, Division of Safety of Dams regulations, and local building or grading ordinances.
7. Will IRWP be exposed to damage due to expansive soils?	Shrink-swell potential as rated in Sonoma County Soil Survey (Soil Conservation Service 1972)	Any construction inconsistent with standard engineering practices	The USDA Soil Conservation Service (SCS) indicates that: "If the shrink-swell potential is rated moderate to very high, shrinking and swelling can damage buildings, roads, and other structures." CEQA Guidelines Appendix G, CEQA Checklist Item VI (d)
8. Will IRWP be exposed to damage due to construction on corrosive soils?	Corrosion potential as rated in Sonoma County Soil Survey (SCS 1972)	Any construction inconsistent with standard engineering practices	The Natural Resources Conservation Service (formerly SCS) indicates that soils with High corrosion can damage uncoated steel and concrete by chemical actions that dissolve and weaken the material.

Table 4.3-7 Evaluation Criteria with Significance Thresholds – Geology, Soils, and Seismicity

9. Will the IRWP be an incompatible land use type in the MRZ-2 classification, designated quarry area, or in The Geysers?	a. Acres of MRZ-2 land developed in incompatible uses	Greater than 0 acres of land	Sonoma County General Plan and the Mineral Land Classification of the Division of Mines and Geology (1989). CEQA Guidelines Appendix G, CEQA Checklist Item X (a)
	b. Acres of quarry site designated by the ARM plan developed in incompatible uses	Greater than 0 acres of land	Sonoma County Aggregate Resources Management (ARM) Plan (1994). CEQA Guidelines Appendix G, CEQA Checklist Item X (a)
	c. Acres of Geysers developed in incompatible uses	Greater than 0 acres of land	Sonoma County General Plan Lake County Geothermal Element BLM [30 United States Code 1001-1025; 43 CFR Part 3200]
10. Will the IRWP cause a substantial adverse change to a hot spring or other unique geologic feature?	Alternation of a unique geologic feature	Any alteration	CEQA Guidelines Appendix G, CEQA Checklist Item V(c)

LAGUNA PLANT UPGRADE COMPONENT

The analysis presented in the IRWP Certified EIR for the Laguna Plant Upgrade component is applicable to the additional facilities and clarification of Figure 2-4.

Under Impacts 3.1.1 through 3.1.5, and 3.1.8 through 3.1.10 (referred to as 1 through 5, and 8 through 10, respectively, in Table 4.3-7, above), the proposed facilities (replacement flow diversion facilities, electrical load center, modified stormwater collection system, and changes to Figure 2-4) would not be located within an area of unstable slope conditions or be subject to ground rupture due to proximity to an active fault because the Laguna Plant is located on flat land that has little or no potential for slope instability and there are no major faults in the immediate vicinity of the Laguna Plant. The soils at the Laguna Plant have a Very Low susceptibility for liquefaction, and are not corrosive (Kleinfelder 2020). None of the activities associated with the Laguna Plant Upgrade would induce seismicity. The IRWP Program includes the requirement that facilities be built in accordance with applicable building codes. The facilities would be designed and built to resist damage from Very Strong Shaking. The Laguna Treatment Plant is not located in an area classified as MRZ-2, a quarry area or The Geysers, and there are no unique geological features in the vicinity of the Plant.

Under Impact 3.1.6 (referred to as 6 in Table 4.3-7, above), off-site water-related erosion could occur if precipitation of sufficient intensity occurred during phases of the construction in which areas of disturbed soil were left exposed. However, the IRWP Program includes preparation of a Storm Water Pollution Prevention Plan (SWPPP) (Project Measure 3.2.3) as part of the Project, which would include measures to contain water and prevent excess run-off. Therefore this impact is less than significant.

Under Impact 3.1.7 (referred to as 7 in Table 4.3-7, above), soils at the LTP have moderate to high expansion potential. In accordance with Project Measure 3.2.6, Standard Engineering Methods for Expansive Soils, the City has utilized a qualified soil engineer to conduct a detailed facility-specific soil survey and incorporated the results into a geotechnical report (Kleinfelder 2020). The City has incorporated recommendations of the report into the design of the facilities, including removing and replacing expansive soils with non-expansive fill beneath concrete slabs or shallow foundations and prohibiting the use of the expansive soils as structure backfill.

The proposed changes, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Geology, Soils, or Seismicity.

4.4 SURFACE WATER HYDROLOGY

Table 4.4-6 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining Surface Water Hydrology impacts. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.4-6 Evaluation Criteria with Significance Thresholds – Surface Water Hydrology

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP cause streambank erosion?	Percentage increases in the average stream power when the average channel velocity exceeds erosion threshold velocities for maximum daily flow in the wet year type.	Greater than 2 percent increase	Based on the typical particle size distribution, erosion of the material in the stream channel should only occur when the average channel velocity is greater than erosion threshold velocities. CEQA checklist question VIII.c
2. Will the IRWP cause flooding?	Increase in the 100-year flood elevation for maximum daily flow in the wet year type.	Greater than 0.1 foot increase. In case of rupture, less than bankfull	FEMA uses 1 foot as a guideline for significance. Sonoma County Water Agency generally does not consider increases of less than 0.1 feet significant during project review. ⁵ CEQA checklist questions VIII.d through VIII.j

LAGUNA PLANT UPGRADE COMPONENT

The analysis presented in the IRWP Certified EIR for the Laguna Plant Upgrade component remains applicable to the proposed facilities, including changes made to Figure 2-4 which provides clarification that construction activities may occur anywhere within the Laguna Treatment Plant. The IRWP Certified EIR found that the expansion of facilities considered under the Laguna Plant Upgrade component would increase the overall area of impervious surfaces at the Plant by approximately 3 acres, which may lead to locally increased runoff, which in turn could cause significant local flooding or streambank erosion. These significant impacts would be reduced to less-than-significant by application of Mitigation Measure 3.3.8 Flood Storage Management.

The proposed facilities (flow diversion facilities, electrical load center, and modified stormwater collection system) would be located within existing paved or compacted gravel areas which are not pervious. Therefore, the proposed improvements would not increase runoff, as the existing areas are already impervious or highly impervious. The proposed changes to Figure 2-4 would clarify that the facilities of the Laguna Plant Upgrade component could be located outside the previously delimited construction zones on the LTP site, but would not allow an increase in the

footprint of the facilities, identified as 3 acres in the IRWP Certified EIR, and therefore would not cause an increase in runoff.

The proposed changes to the Laguna Plant Upgrade component would not cause a significant impact under Impacts 4.1.1 and 4.1.2, streambank erosion or flooding (referred to as 1 and 2, respectively, in Table 4.4-6 above). Therefore, the proposed changes, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Surface Water Hydrology.

4.5 GROUNDWATER

Table 4.5-3 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining Groundwater impacts. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.5-3 Evaluation Criteria with Significance Thresholds – Groundwater

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP degrade groundwater quality at existing or future drinking water wells, resulting in a public health hazard?	Nitrate concentration in existing or future domestic drinking water wells Travel time or distance to the closest domestic well	Nitrate levels in groundwater greater than 10 mg/L nitrate as nitrogen (which corresponds to 45 mg/L nitrate) Travel time less than 6 months or well within 500 feet (12 months and 2000 feet for injection wells and infiltration basins)	CEQA Guidelines Appendix G, CEQA Checklist Item VIII (f); State and federal water quality regulations California State Department of Health Services, draft groundwater recharge (DGWR) regulations for the use of recycled water dated July 21, 2003.
2. Will the IRWP cause groundwater mounding or increase groundwater levels that cause surface water discharge in a non-stream environment?	Increase in groundwater levels	Groundwater that is raised to within 6 feet of the surface	CEQA Guidelines Appendix G, CEQA Checklist Item VIII (d)
3. Will the IRWP lower groundwater levels at existing wells?	Wells be subject to lower groundwater levels	Greater than 0 wells	CEQA Guidelines Appendix G, CEQA Checklist Item VIII (b)
4. Will the IRWP lower groundwater levels in areas that could have been developed for future water supply?	Number of parcels that would be subject to lower groundwater levels	Greater than 0 parcels	CEQA Guidelines Appendix G, CEQA Checklist Item VIII (b)

LAGUNA PLANT UPGRADE COMPONENT

The analysis presented in the IRWP Certified EIR for this component is applicable to these changes to the Laguna Plant Upgrade component.

Trenching and excavation for the proposed facilities (flow diversion facilities, an electrical load center, and a modified stormwater collection system) during construction may encounter groundwater and could locally increase turbidity in groundwater. However, this affect would be temporary and localized. No long-term changes to the groundwater basin would occur as no

water would be extracted or injected into the groundwater and no changes to impervious surfaces would occur (see Section 4.4 Surface Water Hydrology). The potential for groundwater dewatering during construction would be temporary and localized to the immediate area of construction. Impacts on groundwater would be less than significant.

The proposed change to Figure 2-4 would clarify that the elements of the Laguna Plant Upgrade component could be located outside the previously delimited construction zones on the LTP site, but would not allow any changes that would affect groundwater, such as injection or extraction of groundwater. Under Impact 5.1.1 through Impact 5.1.4 (referred to as 1 through 4 in Table 4.5-3, respectively, above), groundwater related impacts would be less than significant as a result of the proposed changes to the Laguna Plant Upgrade component.

Therefore, the proposed facilities and clarification on Figure 2-4 would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Groundwater.

4.6 SURFACE WATER QUALITY

Table 4.6-1 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining impacts to Surface Water Quality. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.6-1 Evaluation Criteria with Significance Thresholds – Surface Water Quality

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will IRWP discharge, indirect discharge, or dam seepage cause numeric-based criteria to be exceeded?	Concentration	Varies	U.S.EPA (California Toxics Rule) criteria; North Coast Region Basin Plan criteria; Basin Plan Action Plan for Accidental Spills and Contingencies CEQA checklist questions VIII.a) and VIII.f)
2. Will IRWP discharge, indirect discharge, or dam seepage cause narrative-based criteria to be exceeded?	Varies	Varies	North Coast Region Basin Plan narrative criteria CEQA checklist questions VIII.a) and VIII.f)
3. Will IRWP construction and operation of IRWP facilities result in a substantial degradation of surface runoff quality?	Compliance with local and state storm water quality regulations requiring implementation of effective Best Management Practices	Failure to implement effective, reasonable and appropriate measures	State of California General NPDES Permits for Discharges of Storm Water Associated with Construction and Industrial Activities Santa Rosa Area Urban Runoff and Storm Water NPDES Permit Standard Urban Storm Water Mitigation Plan (SUSMP) and any other jurisdictions that have SUSMPs at the time of construction California Storm Water Best Management Practice – Construction handbook CEQA checklist questions VIII.c) and VIII.e)
4. Will the IRWP direct or indirect discharge or dam seepage result in non-attainment of established TMDLs?	Loads	Total nitrogen – 265,700 lbs. Ammonia – 35,100 lbs	Clean Water Act section 303(d) and federal regulations (40 CFR 130) CEQA checklist questions VIII.a) and VIII.f)

LAGUNA PLANT UPGRADE COMPONENT

The analysis presented in the IRWP Certified EIR for the Laguna Plant Upgrade component is applicable to the proposed facilities. As evaluated in the IRWP Certified EIR under Impacts 6.1.1, 6.1.2, and 6.1.4 (referred to as 1, 2, and 4, respectively, in Table 4.6-1 above), the Laguna Plant Upgrade component would not result in direct or indirect discharge to surface waters or result in dam seepage, therefore no impact on water quality would occur.

Under Impact 6.1.3 (referred to as 3 in Table 4.6-1 above), the proposed facilities would involve construction that has the potential to disturb soil in waterways and result in a degradation of surface runoff quality. Measures to reduce these impacts were approved as part of the IRWP

Master Plan (Project Measures 3.2.2, Revegetate Temporarily Disturbed Sites, 3.2.3, Storm Water Pollution Prevention Plan and 3.2.9, Protect Creeks from Toxic Discharge), and would ensure that such impacts are reduced to less than significant.

Under Impacts 6.1.1 through 6.1.4, the proposed changes to the Laguna Plant Upgrade component would not have significant impacts on Surface Water Quality. Therefore, the proposed facilities and modification of Figure 2-4, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Surface Water Quality.

4.7 PUBLIC HEALTH AND SAFETY

Table 4.7-8 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining impacts to Public Health and Safety. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.7-8 Evaluation Criteria with Significance Thresholds – Public Health and Safety

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP expose the public to chemicals, radionuclides, pathogenic viruses, bacteria, or other disease organisms at concentrations detrimental to human health?	Proposed measures not in compliance with California Title 22 regulations for the use of recycled water or the treatment plant's NPDES permit.	Greater than 0 occurrences	California Title 22 regulations governing the use of recycled water and the Clean Water Act
2. Will the IRWP expose workers or the public to hazards from a known hazardous waste site?	Ground disturbance near a hazardous waste release site(s).	Greater than 0 occurrences within the Program study area	CEQA Guidelines Appendix G, CEQA Checklist Item VII (d); California Government Code, Section 65962.5; Resource Conservation and Recovery Act; Comprehensive Environmental Response Compensation and Liability Act (as amended by the Superfund Amendments and Reauthorization Act); California Hazardous Waste Control Law
3. Will the IRWP increase potential exposure of the public to hazardous materials due to a chemical release during their routine transport, use, storage or disposal?	Increase in transport, use, storage or disposal of hazardous materials not in accordance with State and federal hazardous materials or waste regulations. Use of acutely hazardous materials or hazardous emissions within ¼ mile of a school.	Greater than 0 occurrences	CEQA Guidelines Appendix G, CEQA Checklist Item VII (a), (b), and (c); Federal Emergency Planning and Community Right-to-Know Act; California Accidental Release Prevention Law; Public Safety sections of local General Plans

Table 4.7-8 Evaluation Criteria with Significance Thresholds – Public Health and Safety

4. Will the IRWP expose the public to safety hazards associated with operation of heavy machinery, vehicles, or equipment; or creation of accessible excavations (trenches, pits, or borings); or creation of an accessible open body of water?	Use of heavy machinery, vehicles or equipment; creation of excavations; or creation of an open body of water in public areas not in accordance with State construction safety regulations.	Greater than 0 occurrences	California Construction Safety Regulations
5. Will the IRWP expose the public to a flooding hazard?	Increased risk of inundation due to proposed element(s) not in compliance with State’s dam safety standards.	Greater than 0 occurrences	CEQA Guidelines Appendix G, CEQA Checklist Item VII (a) and (b); Standards set by the California Department of Water Resources Division of Safety of Dams; Public Safety sections of local General Plans
6. Will the IRWP expose people or structures to a risk of loss, injury or death involving wildland fires?	Operation of the IRWP not in compliance with the State’s Fire Safe Regulations	Greater than 0 occurrences	CEQA Guidelines Appendix G, CEQA Checklist Item VIII (h); Public Safety sections of local General Plans; State Fire Safe Regulations
7. Will the IRWP increase the potential exposure of the public to disease vectors (i.e., mosquitoes)?	Creation of mosquito habitat.	Greater than 0 acres of new mosquito habitat	Marin/Sonoma Mosquito Abatement District criteria for mosquito abatement
8. Will the IRWP create a safety hazard for people residing or working near a public or private airport or airstrip?	Construction activities or permanent structures that create a safety hazard for residents or workers within an airport land use area or within 2 miles of an airstrip or airport without a land use plan	Construction or structures not in compliance with airport land use policies	CEQA Guidelines Appendix G, CEQA Checklist Item VII (e) and (f)

LAGUNA PLANT UPGRADE COMPONENT

The analysis presented in the IRWP Certified EIR for the Laguna Plant Upgrade component is applicable to the proposed facilities.

The proposed changes to the Laguna Plant Upgrade component would not release recycled water to the environment and thus the public would not be exposed to recycled water. Although the Laguna Plant appears on several hazardous materials lists, the proposed upgrades within the existing facility would not affect or be affected by hazardous materials/wastes impacts at the plant and the proposed changes do not require the use of hazardous chemicals during operation. Construction activities would take place within the Laguna Plant and would

not create construction safety hazards for the public or for open bodies of water. No construction activities would occur in wildland areas that are at increased risk of fire. No potential mosquito habitat would be created. The proposed facilities would be constructed within the footprint of the existing plant and thus would not create a safety hazard for people residing or working near an airport or airstrip.

Under Impacts 7.1.1 through 7.1.8 (referred to as 1 through 8, respectively, in Table 4.7-8, above), the changes to the Laguna Plant Upgrade component would have no impact. Therefore, the proposed facilities and modification of Figure 2-4, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Public Health and Safety.

4.8 BIOLOGICAL RESOURCES

The IRWP Certified EIR, 2004 Addendum, and 2007 Addendum identify the lists of federal and state special status plant and animal species with potential to occur on the Laguna Treatment Plant site. No new changes in these lists, specific to the Laguna Plant Upgrade component, have been identified since the March 2007 Addendum (Vollmar Natural Lands Consulting 2020 and CNDDDB 2020).

Table 4.8-6 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining impacts to Biological Resources. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.8-6 Evaluation Criteria with Significance Thresholds – Biological Resources

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP cause loss of individuals, or loss of critical habitat, or loss of occupied habitat of endangered, threatened, or rare species of plants and animals? Endangered, threatened, or rare is defined here as: federally listed endangered, threatened, or proposed plant or wildlife species State listed endangered, threatened, or proposed plant or wildlife species or rare plant species State candidates for listing CNPS List 1B plant species	a) Number of individuals of a plant or wildlife species that would be lost b) Acres of occupied or designated critical habitat c) Linear feet of occupied stream habitat	a) Greater than 0 individuals b) Greater than 0 acres c) Greater than 0 linear feet	FESA, CESA (Sections 2062 and 2067), CEQA (Article 5, Section 15065), and California Native Plant Protection Act (CDFG Code Sections 1900-1913) CEQA Guidelines Appendix G, CEQA Checklist Item VII(a)
2. Will the IRWP cause loss of individuals of CNPS List 2, 3, or 4 plant species?	Loss of populations (i.e, stands) or portions of populations of plants.	Greater than 15 percent of known populations in Sonoma/Lake Counties for CNPS List 2, 3, and 4 plant species.	California Native Plant Protection Act (CDFG Code Sections 1900-1913), CEQA (Article 5, Section 15065) CEQA Guidelines Appendix G, CEQA Checklist Item VII(a)
3. Will the IRWP cause loss of active raptor nest sites?	Number of active nesting sites	Greater than 0 active nest sites	CEQA (Article 5, Section 15065), CDFG Wildlife Habitat Relationships model - (Version 8.0), Fish and Game Code - (Section 3503.5) CEQA Guidelines Appendix G, CEQA Checklist Item VII(a)

Table 4.8-6 Evaluation Criteria with Significance Thresholds – Biological Resources

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
4. Will the IRWP cause loss of animals designated as a federal candidate species, a California fully protected species, or a California species of special concern?	Direct loss of individuals or loss of occupied rookeries (colonial nesting birds), nests (birds), dens (mammals), roost sites (bats), or burrows (all taxa).	a) Greater than 0 individuals. b) Greater than 0 occupied rookeries, nests, roost sites, or burrows.	CEQA (Article 5, Section 15065), CDFG Wildlife Habitat Relationships model - (Version 8.0) CEQA Guidelines Appendix G, CEQA Checklist Item VII(a)
5. Will the IRWP cause permanent loss of native special-status plant communities such as those designated in the California Natural Diversity Data Base as “rare” or in local tree ordinances?	Acres of special-status native plant community lost. Number of local ordinance trees lost.	a) Greater than 0.10 acre for terrestrial plant communities b) Greater than 0.01 acre for aquatic plant communities c) Greater than 0 ordinance trees.	CEQA (Article 5, Section 15065), California Native Plant Protection Act (Fish and Game Code, Sections 1900-1913), CDFG Interim Wildlife/Hardwood Management Guidelines (1989), CNDDDB (2002), Local Tree Ordinances CEQA Guidelines Appendix G, CEQA Checklist Item VII(b) and VII(e)
6. Will the IRWP substantially block or disrupt major migration or travel corridors between essential resource areas for native animals?	Number of corridors substantially blocked or disrupted.	Greater than 0 corridors.	CEQA Guidelines Appendix G, CEQA Checklist Item VII(d)
7. Will the IRWP result in ecological risk to plant and animal populations (i.e., acute or chronic toxicity and bioaccumulation)?	Ecological Quotient (EQ), which is the ratio of the exposure concentration or exposure rate to the appropriate benchmark values	Ecological Quotient greater than 10.	Menzie et al. 1993 Barnthouse et. al. 1986 USEPA 1989 Watkin and Stelljes 1993 CEQA Guidelines Appendix G, CEQA Checklist Item VII(a) and VII(b)
8. Will the IRWP cause a decrease in streamflows, affecting aquatic habitat or aquatic life downstream from proposed dam sites?	Linear feet of stream habitat where 20 percent decrease in wet season streamflow or any decrease in dry season streamflow occurs.	Greater than 0 linear feet	CEQA (Article 5, Section 15065) CEQA Guidelines Appendix G, CEQA Checklist Item VII(a) and VII(b)

Notes:

CDFG California Department of Fish and Game
CEQA California Environmental Quality Act
CESA California Endangered Species Act
CNDDDB California Natural Diversity Data Base

CNPS California Native Plant Society
FESA Federal Endangered Species Act
USFWS United States Fish and Wildlife Service
USFWS U.S. Fish and Wildlife Service

LAGUNA PLANT UPGRADE COMPONENT

The IRWP Certified EIR identified 20 State and federal threatened or endangered plant species and 18 CNPS List 1B plant species with potential to occur at the LTP. California tiger salamander (CTS) was identified as potentially occupying the grasslands of the LTP site and trees on and around the LTP were considered suitable for raptor nesting. Short-eared owl, northern harrier, white-tailed kite, and loggerhead shrike were identified as potentially utilizing grassland habitats.

Since the 2007 Addendum, reconnaissance-level field surveys were conducted at the LTP in 2015, 2016, 2018, and 2020. The findings were documented in *Habitat Assessment Report for California Tiger Salamander and Special-status Plants* (Vollmar Natural Lands 2020). Areas where the proposed facilities would be located are mostly designated as either Ruderal Annual Grassland or Developed. The only exception is the existing stormwater inlet that would be replaced and is located within a seasonal wetland.

The LTP has Marginal Potential Upland habitat for CTS along the northern and eastern portions of the site, as well as along Llano Road. However, none of the proposed facilities are within the Marginal Potential Upland habitat. The majority of construction would occur in the southern corner of the site in a location that is already either paved or comprised of either gravel or gravel mixed with compacted soil. The only exception is the stormwater inlet noted above. The area for the proposed facilities, including limits of disturbance (see Figure 2-2), was inspected by a qualified biologist in September 2020 and no burrows (used by CTS for hibernation) were found due to compaction (personal communication, Steve Brady, City of Santa Rosa). Therefore, the proposed facilities area, including limits of disturbance, does not provide suitable upland habitat for CTS.

Construction for the facilities would not occur within streams, so no impacts to fish or other aquatic life have been identified.

In relation to special-status plants, five special-status plant species were determined to have potential habitat within the LTP, and include Sebastopol meadowfoam, Sonoma sunshine, Burke's goldfields, Sonoma alopecurus, and congested-headed hayfield tarplant. However, during seasonally-appropriate surveys Sebastopol meadowfoam, Sonoma sunshine, and Burke's goldfields were not found (Vollmar Natural Lands 2020). In addition, these three species typically are associated with vernal pools, of which there are none at the LTP (Vollmar natural lands 2020). Sonoma alopecurus is associated with freshwater marsh habitat, which exists along the southern border of the LTP, but is outside of the footprint of the Laguna Plant Upgrade component, including the proposed facilities. Congested-headed hayfield tarplant is associated with annual grasslands. The ruderal annual grasslands in the study area provide low potential habitat for the species given that most areas are mowed or otherwise disturbed. Impacts under 8.1.1, 8.1.2, and 8.1.4 (referred to as Impact 1, 2, and 4, in Table 4.8.6, above) would be less than significant.

With regard to Impact 8.1.3 (referred to as Impact 3 in the table above) trees on and around the Laguna Plant property may be used by raptors for nesting, including red-shouldered hawk, red-tailed hawk, white-tailed kite, American kestrel, barn owl, and great-horned owl. While northern harriers may nest in the grasslands surrounding the LTP. Construction activities near a

nest during the breeding season may cause adult birds to abandon their nest. As a result, impacts to nesting raptors may occur if construction occurs near trees occupied by raptors during the breeding season. Implementation of Mitigation Measure 3.4.1, Protect Active Bird Nests, requires timing of construction activities outside the breeding season or after breeding has been conducted and protection of active nests during the breeding season through the use of exclusion zones. This would result in a less-than-significant impact to active raptor nests.

Finally, with regard to Impacts 8.1.5, 8.1.6 and 8.1.7 (referred to as Impacts 6, 7, and 8, respectively, in the table above), the LTP property is mostly developed; undeveloped portions of the property are highly disturbed, and no special-status plant communities or heritage trees remain on the property. Thus, no impacts would occur from construction of the proposed facilities. Because no terrestrial species in the region utilize or rely upon major migration or travel corridors between essential resource areas, no impacts to terrestrial animal corridors would occur due to construction of the proposed facilities. Because no streams are within the Laguna Plant Upgrade component boundary, the proposed facilities would not result in impacts to major fish migratory corridors. The proposed facilities do not release recycled water to the environment where it could pose an ecological risk to native plant or animal populations.

The clarification on Figure 2-4 does not change the analysis or mitigation measure requirements presented in the IRWP Certified EIR as related to Biological Resources.

Changes to the Laguna Plant Upgrade component would have a less-than-significant impact after mitigation, similar to the IRWP Certified EIR. Therefore, the proposed facilities and modification of Figure 2-4, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Biological Resources.

4.9 JURISDICTIONAL WETLANDS

This section evaluates potential impacts to wetlands and other waters of the U.S. that are regulated by Section 404 of the federal Clean Water Act, Section 10 of the federal Rivers and Harbors Act, Sections 1600-1606 of the California Fish and Game Code, and the state Porter-Cologne Act. The term “jurisdictional wetlands” is used to include both “wetlands” as well as “other waters.” Refer to the Program EIR for the methodology for estimating impacts.

Table 4.9-3 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining impacts to Jurisdictional Wetlands. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.9-3 Evaluation Criteria with Significance Thresholds – Jurisdictional Wetlands

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP fill jurisdictional wetlands or other waters of the U.S.?	Acreage of fill or dredge of jurisdictional wetlands and/or linear miles of fill or dredge of other jurisdictional waters.	a) Greater than 0 acre of jurisdictional wetlands b) Greater than 0 linear miles of other jurisdictional waters. Clean Water Act, 40 CFR 230 Section 404(b)(1). Rivers and Harbors Act, Section 10.	CEQA Guidelines Appendix G, CEQA Checklist Item VII(c)
2. Will the IRWP alter the bed and banks or adjacent riparian habitat of a state stream, lake, or other wetland?	Acreage or linear miles of alteration of state waters.	a) Greater than 0 acre of state waters or adjacent riparian habitat. b) Greater than 0 linear miles of stream/lake bed/banks or adjacent riparian habitat.	Sections 1600 et seq. of the California Fish and Game Code. California Porter-Cologne Act. CEQA Guidelines Appendix G, CEQA Checklist Item VII(c)

LAGUNA PLANT UPGRADE COMPONENT

Since the 2007 Addendum, a *Delineation of Potential Jurisdictional Waters of the U.S.* was conducted for the LTP (Vollmar Natural Lands Consulting 2016). In 2017 it was verified by the U.S. Army Corps of Engineers. All of the proposed facilities have been placed to avoid permanent impacts to jurisdictional wetlands. The only exception is the replacement of a stormwater inlet that is located in a seasonal wetland. The footprint of the proposed inlet is similar to the existing, therefore there would be no permanent impacts, but replacement of the inlet would result in temporary construction impacts around the structure. To mitigate any temporary disturbance that may occur within the seasonal wetland, those sections of Project Measure 3.2.2 that are applicable to the type of temporary disturbance that would occur around the inlet, would apply. Project Measure 3.2.2, Revegetate Temporarily Disturbed Sites,

was adopted as part of the Program, and requires re-contouring to original conditions, reseeding, and protecting the topsoil, among other requirements. Implementation of this measure would restore areas temporarily disturbed by construction actions and replace wetlands that are permanently filled.

The clarification on Figure 2-4 does not change the analysis or mitigation measure requirements presented in the IRWP Certified EIR as related to Jurisdictional Wetlands.

Under Impacts 9.1.1 and 9.1.2 (referred to as 1 and 2, respectively, in Table 4.9-3, above), the changes to the Laguna Plant Upgrade component would have a less-than-significant impact after mitigation, similar to the IRWP Certified EIR. Therefore, the proposed facilities and the proposed changes to Figure 2-4, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Jurisdictional Wetlands.

4.10 TRANSPORTATION

Table 4.10-2 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining Transportation impacts. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.10-2 Evaluation Criteria with Significance Thresholds – Transportation

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will IRWP traffic cause congestion on local roadways?	a) Increase in traffic along access roadways due to construction activities b) Level of Service (LOS) along affected roadways and at intersections	Increase that exceeds roadway capacity Increase in traffic due to operational and maintenance activities resulting in LOS below standards of local jurisdictions	CEQA Guidelines Appendix G, CEQA Checklist Item XV (a)
2. Will IRWP construction cause traffic delays, transit delays, delays for bicycles and pedestrians and delays for emergency vehicles?	Miles of temporary lane or roadway closures resulting in reduction in traffic capacity	Greater than 0 miles.	CEQA Guidelines Appendix G, CEQA Checklist Item XV (e) and (g) Professional Judgment.
3. Will IRWP construction restrict access to residences, businesses, or public facilities?	Number of residences, businesses, or public facilities to which access is restricted without an alternate means of vehicular access	Greater than 0 locations.	CEQA Guidelines Appendix G, CEQA Checklist Item XV (e) Professional Judgment.
4. Will IRWP construction increase traffic hazards to motor vehicles, bicyclists, or pedestrians?	Number of locations where there is ingress or egress of construction equipment onto a major roadway not in accordance with defined safety regulations.	Greater than 0 locations.	CEQA Guidelines Appendix G, CEQA Checklist Item XV (d)
5. Will IRWP construction traffic damage public or private roadways?	Number of miles of roadway that are not restored to existing conditions or better.	Greater than 0 miles.	Professional Judgment.
6. Will there be adequate parking for IRWP construction activities?	Number of construction related vehicles that cannot be accommodated by on-site parking.	Greater than 0 vehicles.	CEQA Guidelines Appendix G, CEQA Checklist Item XV (f)

Table 4.10-2 Evaluation Criteria with Significance Thresholds – Transportation

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
7. Will the IRWP impact residential or commercial on-street parking?	Reduction in the number of on-street parking spaces, where alternative parking is not available.	Greater than 0 spaces.	CEQA Guidelines Appendix G, CEQA Checklist Item XV (f)

LAGUNA PLANT UPGRADE COMPONENT

The IRWP Program EIR found that the impact of construction traffic on Llano Road from the Laguna Plant Upgrade component (Impact 10.1.1) was less than significant, as the maximum daily traffic generated by construction would be 300 vehicles, the daily capacity of the roadway is 5,000 vehicles, and the average daily traffic on Llano Road in 2001 was 3,190. For the proposed facilities, the maximum daily construction traffic is estimated to be 100 vehicles. The average daily traffic on Llano Road is 2,862 (Sonoma County 2015). Therefore, construction traffic from the proposed facilities would be less than significant.

The proposed facilities are not expected to require additional maintenance staff or generate new operational trips, as the majority of improvements are simply replacement of, or modification to, existing facilities, therefore, no impact would result from additional operational traffic. Under Impact 10.1.1 (referred to as 1 Table 4.10.2, above), both temporary construction traffic and operational traffic would be less than significant.

Under Impact 10.1.2 through 10.1.7 (referred to as 2 through 7, respectively, in Table 4.10.2, above), the proposed changes to the Laguna Plant Upgrade component would not cause traffic delays because no lane closures would be required for construction. In addition, no restrictions on access to other properties would be required as construction would be located within or in the right-of-way adjacent to the Laguna Treatment Plant. Under Project Measure 3.2.15, Standard Traffic Control Procedures, adopted as part of the Program, the City would comply with provisions outlined in any required Encroachment and Transportation permits, and also under this measure the City is required and committed to restoring any damaged access roads to existing conditions or better.

The proposed facilities would have no impact on residential and commercial parking because parking for construction equipment and construction personnel can be easily accommodated at the Laguna Treatment Plant, and no new permanent employees would be required.

The clarification on Figure 2-4 does not change the analysis or mitigation measure requirements presented in the IRWP Certified EIR as related to Transportation.

Under Impacts 10.1.1 through 10.1.7 (referred to as 1 through 7 in Table 4.10-2, above), the changes to the Laguna Plant Upgrade component would not have significant impacts on Transportation. Therefore, the proposed facilities and changes to Figure 2-4, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Transportation.

4.11 AIR QUALITY

Table 4.11-9 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining Air Quality impacts. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.11-9 Evaluation Criteria with Significance Thresholds – Air Quality

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will construction of the IRWP generate emissions that expose people to high levels of dust and equipment exhaust?	Size of construction area, duration of construction, amount and size of large equipment, and proximity of receptors.	Non-compliance with measures recommended by BAAQMD, Northern Sonoma County APCD, and Lake County AQMD.	CEQA Guidelines Appendix G, CEQA Checklist Item III (d). Bay Area Air Quality Management District CEQA Guidelines for Assessing Impacts of Projects and Plans
2. Will IRWP emissions cumulatively exceed allowable limits or conflict with or obstruct the implementation of the Bay Area Ozone Attainment Plan?	Emissions of Reactive Organic Compounds, Nitrogen Oxides, Sulfur Dioxide, Carbon Monoxide and Particulates	In the jurisdiction of the BAAQMD: greater than 80 pounds/day for ozone precursor pollutants (nitrogen oxides and reactive organic gases) and PM10; and 550 pounds/day of carbon monoxide; In the jurisdiction of the Northern Sonoma County APCD: greater than 40 tons per year of ozone precursor pollutants, 15 tons per year of PM10; In jurisdiction of the Lake County AQMD greater than 150 pounds/day of a criteria air contaminant.	CEQA Guidelines Appendix G, CEQA Checklist Item III (a) and Item III (c), Bay Area Ozone Attainment Plan, Bay Area Air Quality Management District CEQA Guidelines for Assessing Impacts of Projects and Plans, Northern Sonoma County APCD Rules and Regulations, and Lake County AQMD Rules and Regulations
3. Will the IRWP expose people to substantial levels of toxic air contaminants?	Risk associated with emissions of toxic air contaminants.	Probability of contracting cancer for maximally exposed individual (MEI) exceeds ten in one million or exposure to non-carcinogenic toxic air contaminants will result in a Hazard Index greater than 1 for the MEI.	Bay Area Air Quality Management District CEQA Guidelines for Assessing Impacts of Projects and Plans

Table 4.11-9 Evaluation Criteria with Significance Thresholds – Air Quality

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
4. Will the IRWP violate or contribute to violation of ambient an air quality standard?	Emissions of carbon monoxide. ¹	Greater than 550 pounds per day of CO.	CEQA Guidelines Appendix G, CEQA Checklist Item III (b) Bay Area Air Quality Management District CEQA Guidelines for Assessing Impacts of Projects and Plans
5. Will the IRWP cause odor impacts?	Complaints	Potential for greater than ten odor complaints in a 90 day period or greater than 1 confirmed or 3 unconfirmed complaints per year averaged over 3 years.	CEQA Guidelines Appendix G, CEQA Checklist Item III (e) Bay Area Air Quality Management District CEQA Guidelines for Assessing Impacts of Projects and Plans
6. Will the IRWP cause permit/ monitoring violations at the Geysers Steamfield?	Violations	Greater than 0 violations.	Northern Sonoma Air Pollution Control District Rules and Regulations Lake County AQMD Rules and Regulations
7. Will the IRWP increase greenhouse gas emissions?	Percent increase of equivalent carbon dioxide (eCO ₂) emissions over 2000-2001 levels	Any increase.	City of Santa Rosa, City of Cotati, City of Rohnert Park, and City of Sebastopol as members of Cities for Climate Protection

LAGUNA PLANT UPGRADE COMPONENT

As described in the IRWP Certified EIR for Impact 11.1.1 (referred to as 1 in Table 4.11-9, above), construction-related emissions could impact people and property. Construction of the proposed facilities could generate dust and exhaust similarly. However, the City has adopted Project Measures 3.2.16, Dust Control Program, and 3.2.17, Equipment Exhaust Control Program, which would reduce dust and exhaust impacts to less-than-significant levels according to the recommendation of the Bay Area Air Quality Management District.

The proposed facilities would not require new employees or new operational trips, and would require a small fraction of electricity compared to the remainder of the Laguna Plant Upgrade component (which was found to be less than significant in the IRWP Certified EIR). Impact 11.1.2 (referred to as 2 in Table 4.11.9, above), impacts to cumulative emissions, would be less than significant.

Construction of the proposed facilities would require use of off-road construction equipment, which would result in emissions of criteria air contaminants including toxic air contaminants. However, the IRWP Certified EIR identifies Project Measures 3.2.16, Dust Control Program, and 3.2.17, Equipment Exhaust Control Program, as part of the project description, thereby

decreasing affects to less than significant. Operation of the proposed facilities would not include new sources of toxic air contaminants and, therefore, would not generate a significant impact. Impact 11.1.3 (referred to as 3 in Table 4.11.9, above), impacts for exposing people to substantial levels of toxic air contaminants would be less than significant.

Because the proposed facilities would not generate additional operational traffic, they would not cause or contribute to a violation of carbon monoxide (CO) air quality standards. Impact 11.1.4 (referred to as 4 in Table 4.11.9, above), would have no impact.

Under Impact 11.1.5 in the IRWP Certified EIR, the Laguna Plant Upgrade component odor impacts were considered significant. However, the proposed facilities, unlike the primary treatment facilities at the LTP, would not generate odors, as treated wastewater and stormwater do not smell. No impact would occur.

Under Impact 11.1.6, upgrading the Laguna Treatment Plant would not affect emissions at the Geysers Steamfield.

As disclosed in the IRWP Certified EIR Impact 11.1.7, the Laguna Plant Upgrade component would use approximately 11 million kWh annually, creating an additional 6,172 tons of eCO₂ emissions. This would be a 30 percent increase over 2000-2001 emissions. Since certification of the IRWP Program EIR, the Laguna Treatment Plant has implemented a number of green energy and energy efficiency improvements including a solar array along the southern driveway, a second solar array over the parking lot, and energy efficiency upgrades to reduce the Laguna Treatment Plant's on-site energy footprint. Additionally, Santa Rosa Water performs energy audits of facilities and operations to monitor and improve energy use. Increased energy use from the proposed facilities would result in an unavoidable increase in eCO₂ emissions. The proposed pumps would be rated appropriately for the pumping need and the facility lighting would operate by use of photocells with manual on/off, thus being more energy efficient. The diversion pumps would be needed only a few times a year and the stormwater pumps would be used only during or after storms. The proposed facilities would increase eCO₂ emissions slightly as a result of energy consumption by pumps and lighting; however, this increase is anticipated to be small and would not result in a substantially more severe significant impact.

The clarification on Figure 2-4 does not change the analysis or mitigation measure requirements presented in the IRWP Certified EIR as related to Air Quality.

Under Impact 11.1.1 through 11.1.7 (referred to as 1 through 7, respectively, in Table 4.11.9, above), the proposed facilities and modification of Figure 2-4, including changed conditions, would not result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects for Air Quality.

4.12 NOISE

Table 4.12-11 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining Noise impacts. Following is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by the Addendum.

Table 4.12-11 Evaluation Criteria with Significance Thresholds – Noise

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will construction or operation of the IRWP generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Projected noise levels as measured at the receiving land use based on applicable state or local regulation.	a. Greater than noise level for receiving land use allowable by local ordinance or regulation. b. Construction noise greater than 60 dBA Leq daytime, 55 dBA Leq nighttime.	CEQA Guidelines Appendix G, CEQA Checklist Item XI (a). a. Noise Element of the General Plans of Sonoma County; the cities of Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Sebastopol and Santa Rosa; and Town of Windsor Lake County Noise Ordinance City of Santa Rosa Municipal Code, Chapter 17-16 City of Rohnert Park Municipal Code, Section 9.44 City of Sebastopol Municipal Code, Section 8.24.030 City of Petaluma Zoning Ordinance, Section 22-301.3 b. California Department of Health, Office of Noise Control Model Community Noise Ordinance.
2. Will IRWP construction activities result in generation of excessive ground-borne vibration levels?	Projected vibration levels at receiving land use.	Greater than 0.5 inch/sec. peak particle velocity	CEQA Guidelines Appendix G, CEQA Checklist Item XI (b). U.S. Bureau of Mines Safe limit for normal structures.
3. Will operation of the IRWP cause a substantial permanent increase in ambient noise levels above existing levels in the vicinity?	Projected noise levels at receiving land uses with the project compared to ambient noise levels.	a. Greater than 5 dBA Ldn increase and remaining below “normally acceptable” noise level for affected use, or b. Greater than 3 dBA Ldn increase exceeding the “normally acceptable” level for the affected use	CEQA Guidelines Appendix G, CEQA Checklist Item XI (c) Historical precedent based upon community annoyance studies.

Table 4.12-11 Evaluation Criteria with Significance Thresholds – Noise

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
4. Will construction activities and traffic required for the IRWP result in a substantial temporary or periodic increase in ambient noise levels above existing levels in the vicinity?	Projected noise levels at the receiving land use with the construction activities compared to existing ambient noise levels.	Greater than 5 dBA Leq increase in noise above existing ambient noise during daytime or nighttime.	CEQA Guidelines Appendix G, CEQA Checklist Item XI (d). Historical precedent based upon community annoyance studies.
5. Will the IRWP expose people to noise in the vicinity of a public or private airport?	Incompatible use located within: a. An adopted airport land use plan; b. Two miles of an airport for which there is no adopted airport land use plan	Any such use.	CEQA Guidelines Appendix G, CEQA Checklist Item XI (e) and Item XI (f).

LAGUNA PLANT UPGRADE COMPONENT

Under Impacts 12.1.1 and 12.1.3 (referred to as 1 and 3, respectively, in Table 4.12-11, above), new noise sources at the Laguna Plant would include construction and operation of the diversion and stormwater pumps. Construction activities for the proposed facilities may generate noise in excess of standards in the County’s Noise Ordinance. Under Mitigation Measure 3.4.3, Construction Noise Control Measures, the City would, where feasible, implement design and construction measures to reduce noise impacts on sensitive receptors. The closest sensitive receptor, a residence, is located approximately 350 east of the construction area. Because the efficacy of Mitigation Measures 3.4.3 cannot be determined at this time, Impact 12.1.1 is considered significant after mitigation for construction of the proposed facilities. With regard to operational impacts under Impact 12.1.1 and 12.1.3, operational noise would be generated from the new diversion and stormwater pumps, that may generate noise in excess of standards in the County’s Noise Ordinance. However, the nearest residences to the location of the proposed pump stations are approximately 1,400 feet to the southeast and to the northeast, respectively, of that location. Given the distance and intervening terrain that includes other LTP structures, it is anticipated the pump noise would attenuate significantly prior to reaching the residences and therefore not exceed any of the thresholds established in Table 4.12-11. Operational noise impacts from the new facilities would thus be less than significant.

Under Impact 12.1.2, the type of construction activities identified for the proposed facilities would not generate ground-borne vibration levels, as no blasting or pile driving would be needed. No impact would occur.

The IRWP Certified EIR found that under Impact 12.1.4 (referred to as 4 in Table 4.12-11, above), construction activities and traffic required for the Laguna Plant Upgrade component would result in a substantial increase in ambient noise levels above existing levels in the vicinity. Construction and traffic for the proposed facilities would be less intense than that

analyzed for the Laguna Plant Upgrade component; however, noise levels would be significant. Under Mitigation Measure 3.4.3, Construction Noise Control Measures, the City would, where feasible, implement design and construction measures to reduce noise impacts on sensitive receptors, but impacts may remain significant.

Under Impact 12.1.5, the Laguna Plant is not located within an adopted airport land use plan, or within two miles of any public or private airport. Therefore the proposed facilities would not expose people to noise in the vicinity of a public or private airport.

The clarification on Figure 2-4 does not change the analysis or mitigation measure requirements presented in the IRWP Certified EIR, as related to Noise.

Under Impacts 12.1.1 through 12.1.5 (referred to as 1 through 5, respectively, in Table 4.12-11, above), the proposed facilities and changes to Figure 2-4, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Noise.

4.13 CULTURAL RESOURCES AND PALEONTOLOGY

Table 4.13-2 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining impacts to Cultural Resources and Paleontology. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by this Addendum.

Table 4.13-2 Evaluation Criteria with Significance Thresholds – Cultural Resources and Paleontology

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP cause a substantial adverse change in the significance of a historical or archeological resource as defined in Title 14, California Code of Regulations §15064.5?	Physical demolition, destruction, relocation, or material alteration of a historical or archaeological resource	Greater than 0 historical or archaeological resources	CEQA Guidelines Appendix G, CEQA Checklist Item V (a) and Item V (b). Title 14, California Code of Regulations §15064.5 Public Resources Code §21084.1
2. Will the IRWP have an adverse effect on any historic property that is included in, or eligible for inclusion in, the National Register of Historic Places?	The direct or indirect alteration of any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that will diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association	Greater than 0 historic properties	National Historic Preservation Act of 1966, as amended, Section 106
3. Will IRWP disturb any human remains, including those interred outside of formal cemeteries?	Disturbance of any human remains	Greater than 0 human remains	CEQA Guidelines Appendix G, CEQA Checklist Item V (d) Title 14, California Code of Regulations §15064.5(d) Health and Safety Code §7050.5 Public Resources Code §5097.9
4. Will the IRWP disturb any Native American human remains, associated grave goods, or items of cultural patrimony?	Disturbance of any Native American human remains, associated grave goods, or items of cultural patrimony	Greater than 0 human remains, associated grave goods, or items of cultural patrimony	Health and Safety Code §7050.5 Public Resources Code §5097.9 NAGPRA if on federal or tribal lands
5. Will the IRWP directly or indirectly destroy a unique paleontological resource or site?	Ground-disturbing activity within geologic units with the potential to contain important fossils	Greater than 0 occurrences	CEQA Guidelines Appendix G, CEQA Checklist Item V (c) Public Resources Code §5097.5 Archeological and Historic Data Preservation Act of 1974

LAGUNA PLANT UPGRADE COMPONENT

The Anthropological Studies Center conducted a records search at the Northwest Information Center for the Area of Potential Effect (APE) which included the Laguna Treatment Plant and a ¼-mile buffer surrounding it, on September 11, 2015. Fourteen previous cultural resource studies have been conducted within the APE, which cover approximately 50% of the LTP site. Although five recorded prehistoric archaeological sites were found within the ¼-mile buffer, none were found within the LTP. A request of the Native American Heritage Commission (NAHC) to review the Sacred Lands file for information on Native American cultural resources in the APE, failed to indicate the presence of Native American cultural resources in the APE. (ASC 2015)

In November 2016, 14 geotechnical borings, located throughout the LTP in areas where Disinfection and Diversion improvements would occur, were monitored and inspected by a professional archaeologist and a Federated Indians of Graton Rancheria tribal monitor. All of the bores examined were negative for indicators of archaeological deposits. In general, there has been extensive grading within the LTP with areas of fill 8 to 10 feet below the current ground surface and even deeper in some areas. The entire site has been grubbed prior to construction so that buried topsoil is not present. In addition, the area is prone to flooding, with most of the underlying soils being clay. (ASC 2016) In June 2020, 11 additional geotechnical borings, generally located around the eastern and southern edge of the LTP with one boring located along Llano Road toward the north, were monitored and inspected by a professional archaeologist and a Federated Indians of Graton Rancheria tribal monitor. All of the bores examined were negative for indicators of archaeological deposits, and fill material was found up to 10 feet. (ASC 2020)

The conclusion of both geotechnical observations was that no archaeological materials were identified during borings and soils observed did not indicate sensitivity for cultural resources. Consequently, no further investigation of the LTP is recommended. (ASC 2016 and 2020)

Given the results of the site-specific studies and investigations, impacts from the addition of the proposed facilities (flow diversion, electrical load center, and modified stormwater collection system), would not impact cultural resources under Impacts 13.1.1 through 13.1.4 (referred to as 1 through 4, respectively, in Table 4.13-2, above).

Under Impact 13.1.5, although there are no known paleontological resources on the site, as described in the IRWP Program EIR the underlying geologic unit may contain fossils. Therefore, it is possible that construction of the proposed facilities could affect unknown paleontological resources. Similar to the IRWP Program EIR, this would be a significant impact. Implementation of the previously adopted Mitigation Measure, 3.3.17, Identification, Evaluation, and Avoidance of Cultural and Paleontological Resources, provides a process to address potential impacts to paleontological resources if encountered. Implementation of the steps outlined in the mitigation measure, including data recovery, would ensure that impacts to paleontological resources would be reduced to a less-than-significant level.

The clarification on Figure 2-4 does not change the analysis or mitigation measure requirements presented in the IRWP Certified EIR, as related to Cultural and Paleontological Resources.

The proposed facilities and the modification to Figure 2-4, including changed conditions, would not result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects for Cultural Resources and Paleontology.

4.14 VISUAL RESOURCES

Table 4.14-2 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining impacts to Visual Resources. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by this Addendum.

Table 4.14-2 Evaluation Criteria with Significance Thresholds – Visual Resources

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP have a substantial adverse effect on scenic vistas or substantially damage scenic resources including those designated by City or County General Plans, or Caltrans designated Scenic Highways?	Level of visual contrast, view obstruction, degradation in visual quality.	Strong visual contrast ¹ , obstruction in viewed area ² from foreground ³ or middleground ³ , or loss or alteration of a specific scenic resource ⁴	CEQA Guidelines Appendix G, CEQA Checklist Item I (a) Sonoma County General Plan, Open Space Element; Lake County General Plan, Environmental Quality Element; Santa Rosa General Plan, Urban Design, Open Space and Conservation, and Transportation Elements; Sebastopol General Plan, Community Identity Element; Rohnert Park General Plan, Community Design Element; Cotati General Plan, Community Identity Section; Petaluma General Plan, Community Character Element; Windsor General Plan, Environmental Resources Element; Healdsburg General Plan, Scenic Resources and Urban Design Element; and Cloverdale General Plan, Community Design and Conservation and Open Space Elements

Table 4.14-2 Evaluation Criteria with Significance Thresholds – Visual Resources

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
2. Will the IRWP substantially degrade the existing visual character of the site or its surroundings, including views from private residences, high volume travelways ⁵ , recreation use areas ⁶ , or other public use area ⁷ ?	Level of visual contrast, view obstruction, and degradation of visual quality	- Strong visual contrast ¹ , - obstruction in viewed area ² from foreground ³ or middleground ³ , or - loss or alteration of a specific scenic resource ⁴	CEQA Guidelines Appendix G, CEQA Checklist Item I (b) Sonoma County General Plan, Open Space Element; Lake County General Plan, Environmental Quality Element; Santa Rosa General Plan, Urban Design, Open Space and Conservation, and Transportation Elements; Sebastopol General Plan, Community Identity Element; Rohnert Park General Plan, Community Design Element; Cotati General Plan, Community Identity Section; Petaluma General Plan, Community Character Element; Windsor General Plan, Environmental Resources Element; Healdsburg General Plan, Scenic Resources and Urban Design Element; and Cloverdale General Plan, Community Design and Conservation and Open Space Elements
3. Will the IRWP create a new light source?	High intensity light or glare towards private residences	Greater than 0 residences affected	CEQA Guidelines Appendix G, CEQA Checklist Item I (c)

1. Strong Visual Contrast - (one or more of the following) regraded land forms are flat with little to no contour: line of major ridgeline is altered and not consistent with surrounding ridgelines or minor ridgelines are eliminated; inconsistent color with adjacent landscape character; elimination of landscape texture created by exposed soil or removal of vegetation; form of project grossly exceeds scale of natural land forms.
2. Viewed area defined as area of landscape (i.e., everything except sky) as shown in a photograph from the closest sensitive viewpoint, taken with a normal (50 mm) lens.
3. Foreground: 0-1/2 mile; Middleground: 1/2-3 miles
4. Specific Scenic Resource - (one or more of the following) landscape component that creates striking feature; Landform - steep (>60%) undulating/dissected slopes, distinctive rock outcrops, or pronounced ridgelines; Water - major bodies of water that provide reflective qualities and irregular shorelines, or major/permanent streams/rivers with diversity of meanders, flows, rapids, rock outcrops, or river-banks; Vegetation - mature stands of native or cultural species (oaks and eucalyptus) in natural groves or distinct planted patterns (i.e. eucalyptus along roads or as planted wind breaks).
5. High volume travelways: State highways not part of the State Scenic Highway system and City or County arterial roadways.
6. Recreation use areas: Designated recreation sites, parks, trails, or other areas managed for public recreation.
7. Public use area: Downtown areas, cemeteries, community centers, attracting the public on a daily or regular basis.

LAGUNA PLANT UPGRADE COMPONENT

Regarding Impacts 14.1.1 and 14.1.2 (referred to as 1 and 2, respectively, in Table 4.14-2, above), the proposed electrical load center and wet well/pump station structures for the stormwater and flow diversion facilities may be partially visible from Llano Road and the Santa Rosa – Sebastopol Community Separator west of Llano Road. Scenic vistas and visual character would not be substantially affected by the proposed facilities because there are no on-site scenic resources that would be removed, and the proposed facilities are very similar in scale, placement, and mass to the existing facilities at the LPT. Impacts would be less than significant.

Regarding Impact 14.1.3, the proposed facilities would include limited exterior lighting for the diversion and stormwater wet well/pump station facilities, and the electrical load center. Exterior lighting will be on photocells with manual on/off overrides and limited to illuminating the immediate vicinity of the respective facility. Project Measure 3.2.20, Control of Light and Glare, adopted by the City as part of the project, would control light and glare at the facilities. Any required lighting would be shielded and used only as needed. The operational impact would be less than significant. Although it is not anticipated, nighttime construction may be required for the proposed facilities, similar to other facilities under the Laguna Plant Upgrade component. In that event, the light sources used during construction would not substantially affect nearby residences, as the closest residence to the majority of construction is approximately 1,400 feet away and shielded by vegetation. Impacts during nighttime construction would be less than significant.

Under Impacts 14.1.1 through 14.1.3, the changes to the Laguna Plant Upgrade component would not have new significant impacts on Visual Resources. Therefore, the proposed facilities and changes to Figure 2-4, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Visual Resources.

4.15 PUBLIC SERVICES, UTILITIES, AND RECREATION

Table 4.15-2 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining impacts to Public Services, Utilities, and Recreation. Following is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by this Addendum.

Table 4.15-2 Evaluation Criteria with Significance Thresholds – Public Services, Utilities and Recreation

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the IRWP increase demand for police and fire services; water and sewage treatment services; or solid waste disposal facilities to such a degree that accepted service standards are not maintained?	Additional personnel, equipment or capital facilities that will be needed to serve the Program.	Any additional personnel, equipment or capital facilities required beyond existing or planned capacity	CEQA Guidelines Appendix G, CEQA Checklist Item XIII (a) ¹ and CEQA Checklist Items XVI (e) and (f) General Plans of the Cities of Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Santa Rosa, Sebastopol, and Windsor; General Plans of Lake and Sonoma Counties Title 14, California Code of Regulations §1270, State Fire Safe Regulations
2. Will the IRWP increase demand for park and recreation facilities to such a degree that accepted service standards are not maintained, requiring the construction of new facilities?	Additional recreational demand	Any additional demand beyond existing or planned capacity	CEQA Guidelines Appendix G, CEQA Checklist Item XIV (a) and (b) General Plans of the Cities of Cloverdale, Cotati, Healdsburg, Petaluma, Rohnert Park, Santa Rosa, Sebastopol, and Windsor General Plans of Lake County and Sonoma County
3. Will the IRWP conflict with wells, septic fields, or water or wastewater utilities?	Location of the IRWP component in relation to wells, water lines, septic or wastewater lines	IRWP component within 50 feet of wells or water lines, or within 10 feet of septic or wastewater lines	Title 22, California Code of Regulations ²
4. Will the IRWP result in the construction of new or expanded water treatment, wastewater polishing treatment facilities, or storm drainage facilities?	Need for new facilities.	Any new facilities beyond those included in the IRWP	CEQA Guidelines Appendix G, CEQA Checklist Items XVI (b) and (c)

LAGUNA PLANT UPGRADE COMPONENT

The analysis presented in the IRWP Certified EIR for the Laguna Plant Upgrade component is applicable to the proposed facilities.

Under Impacts 15.1.1 and 15.1.2, no additional employees would be required to operate and maintain the new facilities. Therefore, the proposed facilities would not have an effect on the demand for public services and recreation in the area. The proposed facilities would not generate additional solid waste that would need to be transferred to a landfill. Hazardous materials would continue to be stored and handled in accordance with federal, State and local regulations and would not increase the risk of fire or the need for emergency response services. Response times for police and fire services would not be affected. Thus, service standards would be maintained and the impact on public services, utilities, and recreation would remain less than significant.

Under Impact 15.1.3 the changes in the Laguna Plant Upgrade component would have no impact on wells, septic fields, or water or wastewater utilities. No private wells, septic fields, or water or other wastewater utilities would be impacted since the proposed facilities would be contained within the existing footprint of the site. The design of the proposed facilities would ensure that the existing wastewater treatment plant would not be damaged.

Regarding Impact 15.1.4, the proposed facilities would not increase the need for additional wastewater, water, or drainage improvements. In accordance with Project Measure 3.2.21, Prevent Storm Runoff beyond Capacity of Drainage Facilities, the component would include properly designed storm drainage systems to accommodate additional storm runoff generated by impervious surfaces. Indeed, the proposed improvements to the Plant's stormwater system would implement this Measure.

The clarification on Figure 2-4 does not change the analysis or mitigation measure requirements presented related to Public Services, Utilities, and Recreation, in the IRWP Certified EIR.

Under Impacts 15.1.1 through 15.1.4 (referred to as 1 through 4, respectively, in Table 4.15-2, above), the changes to the Laguna Plant Upgrade component would not have significant impacts on Public Services and Utilities. Therefore, the proposed facilities and changes to Figure 2-4, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Public Services and Utilities.

4.16 ENERGY

Table 4.16-1 from the 2004 Certified EIR, shown below, presents evaluation criteria and significance thresholds for determining Energy related impacts. Following the table is the impact analysis specific to those changes to the Laguna Plant Upgrade component covered by this Addendum.

Table 4.16-1 Evaluation Criteria with Significance Thresholds – Energy

Evaluation Criteria	As Measured by	Significance Thresholds	Sources of Criteria
1. Will the Program require more energy than providers could deliver?	Report of energy providers	Need for electric facilities beyond capability of provider to supply	California Energy Commission and Public Utilities Commission planning requirements

LAGUNA PLANT UPGRADE COMPONENT

The proposed facilities would include new pumps for the flow diversion facilities and stormwater improvements, as well as some limited exterior lighting for the new facilities. The proposed pumps would be rated appropriately for the pumping need and the facility lighting would operate by use of photocells with manual on/off, thus more energy efficient. Since the IRWP EIR was certified, a variety of solar and energy efficiency projects have been implemented at the Laguna Treatment Plant to reduce energy demand, including a micro-grid with a 2-megawatt battery for energy storage. Also, an expanded cogeneration facility, the Combined Heat and Power Facility, is now operating at the LTP. Additionally, Santa Rosa Water performs energy audits of facilities and operations to monitor and improve energy use. The proposed facilities would increase energy consumption; however, this increase is anticipated to be small. Energy providers would be able to provide sufficient electricity to the plant.

The clarification to Figure 2-4 would have no effect on the amount of energy required.

Under Impact 4.16.1 (referred to 1 in Table 4.16-1, above), the proposed facilities would not result in significant impacts. The proposed facilities and modification of Figure 2-4, including changed conditions, would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for Energy.

CUMULATIVE IMPACTS

CUMULATIVE PROJECTS

Table 4.1 provides closely related past (since the August 2007 Addendum), present, and reasonably foreseeable future cumulative projects that have been identified in or near the Laguna Treatment Plant. This updated list adds to the cumulative list in the certified 2004 EIR and approved 2007 Addendum to the Program EIR.

Table 4.1 Cumulative Projects List Update

Agency	Project Name	Status	Project Location and Description
Past Projects (since August 2007)			
City of Santa Rosa	C00605 - LTP Plant Sewer Lining	Completed 2009	Laguna Treatment Plant East Headworks, bypass pumping.
City of Santa Rosa	C00579 – LTP Combined Heat and Power Project	Completed 2014	Laguna Treatment Plant Construction of a new building, 4 new cogeneration engines, and ancillary electrical and gas treatment equipment.
City of Santa Rosa	C01553 - South Driveway Widening	Completed 2013	Laguna Treatment Plant Widened south driveway
City of Santa Rosa	C01682 - New Sanitary Sewer Trunk Line	Completed 2013	Laguna Treatment Plant Installed new 48" pipe between MH# 6 & 7.
City of Santa Rosa	C01759 - Phase 2 of Trunk Sewer and Vault Improvements	Completed 2013	Laguna Treatment Plant New Vault & 42" & 48" lines into & out of MH# 8.
City of Santa Rosa	C02016 – LTP Temporary Flood Protection	Completed 2016	Laguna Treatment Plant Project was built to protect secondary, tertiary, and disinfection processes at LTP from low to moderate stormwater flooding that is likely to occur before a permanent flood protection project is constructed. Consists of sections of removable barriers at access points in conjunction concrete block walls across unoccupied areas of southwest portion of plant.
City of Santa Rosa	C02064 — Primary Treatment Structure Upgrades Phase 1	Completed 2017	Laguna Treatment Plant Primary Treatment Structure Upgrades Phase 1.
City of Santa Rosa	C01883 – High Strength Waste Receiving Facility	Completed 2017	Laguna Treatment Plant Build a high strength waste receiving facility Due to accept food waste slurry from local industries, including breweries. High strength waste receiving station includes tanks, pumps, piping and controls.
City of Santa Rosa	C01959 - Microgrid Project	Completed 2019	Laguna Treatment Plant New Solar Panels in Administration Parking Area, New battery building near Emergency Generator Facility and Exhaust muffler work outside Combined Heat and Power Building

Table 4.1 Cumulative Projects List Update

Agency	Project Name	Status	Project Location and Description
City of Santa Rosa	C02193 – LTP Digester 1 Reroof	Completed 2020	Laguna Treatment Plant The digester floating covers had reached the end of their useful service life and required replacement.
City of Santa Rosa	C02101 - LTP Digester Gas Conditioning Improvements,	Completed 2020	Laguna Treatment Plant Ground Disturbance occurred next to Gas Booster Bldg, work was in the Combined Heat & Power building, the Primary Treatment Structure around Gas Booster Bldg. and outside piping.
City of Santa Rosa	C02320 – LTP Digester 2 Reroof	Currently in construction	Laguna Treatment Plant Digester floating covers had reached end of useful service life and required replacement.
City of Santa Rosa	Purchase of adjacent property on Meadow Lane and demolition of two residences	Complete	North side of Meadow Lane
Future and Approved Projects			
City of Santa Rosa	C02192 – Emergency generator fuel tank replacement	Unknown	Laguna Treatment Plant Outer wall of existing emergency generator diesel fuel storage tank has started to deform preventing monitoring of the annual space. Project also includes engine radiator replacements.
City of Santa Rosa	C02105 – LTP Chillers and Climate Control Upgrades at Admin and Annex Building	Unknown	Laguna Treatment Plant Three chillers, two boilers, and associated control equipment have reached end of service life as identified in completed condition assessment report. One chiller is located inside Annex Building and two chillers are located outside rear of Administration Building.
County of Sonoma	Use Permit - Commercial Compost Sales	Proposed Application Under Review	597 Wilfred Ave Bellevue Request for Use Permit to allow for commercial sale of compost currently processed on site, application does not request on-site retail sales, public drop-off of material for compost or an expansion of current compost use, to be located on 4 contiguous parcels, a combined 18 acres in size.
City of Santa & County of Sonoma	Sonoma Organics Composting Facility	Proposed 2021 - 2022	4301 Llano Road Construct and operate a new organics processing facility, which includes composting and anaerobic digestion, on City-leased land adjacent to the Laguna Treatment Plant. Site contains an existing biosolids compost facility. Organic materials will be delivered inside a large building with a state-of- the-art odor control system called a biofilter. Methane-rich biogas generated by anaerobic digestion would be used as an onsite energy source. Solid materials to be composted will be put into long concrete bunkers, covering a network of air ducts in floor.

The proposed facilities (flow diversion facilities, a new electrical load center, modified stormwater collection system) and clarification to Figure 2-4, together with the past, present, and future impacts of the cumulative projects listed in Table 4.1, would not create new cumulative impacts beyond those examined in the IRWP Program EIR, and no new mitigation measures would be required. The additional facilities would have no new cumulative impacts or cumulative impacts that are substantially more severe than described in the IRWP Certified EIR, as discussed below. The additional facilities are isolated to the footprint of the LTP which was evaluated in its entirety in the IRWP Certified Program EIR.

Table 4.1 lists past, present, and future cumulative projects within, and near, the Laguna Treatment Plant. The IRWP Certified EIR identified potential cumulative impacts in the areas of land use, geology, groundwater, public health and safety, wetlands, transportation, greenhouse gas emissions, cultural resources, and visual resources. The projects are mostly limited to facility maintenance and modifications that have occurred or will occur within the footprint of the LTP. Two proposed projects in proximity to the LTP site have been identified. Both are subject to land controls, would provide similar services to existing conditions at their respective sites, and are not anticipated to be under construction at the same time as the proposed facilities. The potential impacts from the recent projects listed in Table 4.1 do not change the type or level of cumulative impacts identified in the Program EIR.

CEQA-REQUIRED SECTIONS

GROWTH-INDUCING IMPACTS OF THE PROGRAM

Section 6.2 of the IRWP Certified EIR provides a discussion of potential growth inducing impacts that is relevant to this Addendum. The growth inducing impacts discussed in the Program EIR state that the IRWP will necessitate a minimal increase in employment. This conclusion does not change with the addition of the proposed facilities, as they would not require new employees.

SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

The significant and unavoidable impacts identified in the IRW Certified EIR are the same in this Addendum. There are no new significant unavoidable impacts as a result of the proposed facilities.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The commitments associated with the Program are discussed in Section 6.2 of the IRWP Certified EIR. The discussion presented there is applicable to the IRWP with the addition of the proposed improvements to the Laguna Plant Upgrade component.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 6.5 of the IRWP Certified EIR identified the Environmentally Superior Alternative as Alternative 1, Indoor Water Conservation. The IRWP Certified EIR also identified Combination of Alternatives 5 as the environmentally superior combination. Combination of Alternatives 5 combined Indoor Water Conservation with Russian River direct discharge.

No information is presented in this Addendum to change the identification of environmentally superior alternatives as presented in the Program EIR.

5. DISINFECTION AND DIVERSION IMPROVEMENTS CEQA CHECKLIST

The Disinfection and Diversion Improvements Project, as described in Chapter 2, subject to this CEQA Checklist would implement the Laguna Plant Upgrade component which was analyzed in the IRWP Certified EIR. This CEQA Checklist evaluates the Disinfection and Diversion Improvements Project to determine whether it is within the scope of, and covered by, the IRWP Certified EIR or whether a new environmental document must be prepared.

This document constitutes the project-level environmental review for the Disinfection and Diversion Improvement Projects.

ORGANIZATION OF THIS CEQA CHECKLIST

This CEQA Checklist describes the potential environmental impacts associated with the Disinfection and Diversion Improvements Project for each evaluation criteria established in the IRWP Certified EIR. The evaluation criteria and significance thresholds set forth in the IRWP Certified EIR are provided in the following table (Tables 5.1). For each evaluation criterion, the table provides a summary of the Disinfection and Diversion Improvements Project's impact and its level of significance. The table also lists any mitigation measures from the IRWP Certified EIR needed to reduce any significant impacts. For comparison purposes, the table also provides the level of significance for each impact as identified in the IRWP Certified EIR. The level of significance is identified as one of the following:

- Less than Significant after Mitigation – Impact is significant before mitigation, but can be mitigated to a less-than-significant level. This impact is shown as a ☉ in the table.
- Significant and Unavoidable – Impact is significant before mitigation, and no feasible mitigation has been identified to reduce the impact to a level that is less than significant. This impact is shown as a ● in the table.
- Less than significant impact – No mitigation is required. This impact is shown as a ○ in the table.
- No impact. This impact is shown as == in the table.

UPDATES OF INFORMATION

Relevant information that has been identified since July 2007 (preparation of the August 2007 Addendum and approval of the Geysers Expansion Project) is considered in the analysis as discussed at the beginning of Chapter 4.

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
Land Use						
1. Will the Project be inconsistent with the policies of the Land Use Element or land use plan map of an adopted General Plan, or with adopted zoning regulations?	Greater than 0 acres					
<i>1.1.1 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would be located within the existing LTP and would be compatible with the existing land use. No impact would result.	==	==	None needed	Yes
2. Will the Project physically divide an established community?	Any physical barrier to movement within the community					
<i>1.1.2 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would be located within the existing LTP and would not introduce a physical barrier to within a community. No impact would result.	==	==	None needed	Yes
3. Will the Project introduce inappropriate uses in a Community Separator?	Greater than 0 acres					
<i>1.1.3 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would not be located within a Community Separator. No impact would result.	==	==	None needed	Yes
4. Will the Project increase potential for conflict as a result of incompatible land uses?	Greater than 0 linear feet					
<i>1.1.4 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would be	==	==	None	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
		contained within the existing LTP and would not introduce incompatible land uses. No impact would result.			needed	
5. Will the Project convert non-urban land to urban uses for IRWP facilities?	Greater than 0 acres					
<i>1.1.5 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would be contained within the existing LTP and would not convert non-urban land to urban uses. No impact would result.	==	==	None needed	Yes
6. Will the Project cause damage to adjacent vineyards by increasing glassy-winged sharpshooter populations?	Greater than 0 acres					
<i>1.1.6 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would be contained within the existing LTP and would not result in the conversion of public open space. No impact would result.	==	==	None needed	Yes
Agriculture						
1. Will the Project cause loss of Farmland?	Greater than 0 acres of status farmland lost					
<i>2.1.1 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would be contained within the existing LTP and would not result in loss of farmland. No impact would result.	==	==	None needed	Yes
2. Will the Project cause conflict with Williamson Act contracts?	Greater than 0 acres of land removed from Williamson Act contracts					
<i>2.1.2 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would be contained within the existing LTP and would not	==	==	None needed	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
		conflict with a Williamson Act contract. No impact would result.				
3. Will the Project reduce agricultural soil productivity due to erosion of topsoil from application of recycled water?	Greater than 0 acres of erodible soils irrigated by recycled water and not subject to erosion control plans under the Sonoma County Vineyard Erosion and Sediment Control Ordinance or the California Forest Practice Rules					
2.1.3 Laguna Plant Upgrade		Disinfection and diversion improvements would occur within previously developed areas at the LTP and would not result in loss of erodible agricultural soils. No impact would result.	==	==	None needed	Yes
4. Will the Project reduce agricultural soil productivity due to build-up of trace elements or salinity?	a) Exceedance of FAO Guidelines b) Exceedance of state guidelines or federal rules					
2.1.4 Laguna Plant Upgrade		Disinfection and diversion improvements do not involve the land application of recycled water and would not affect agricultural soil productivity. No impact would result.	==	==	None needed	Yes
5. Will the Project result in the conversion of timberlands to non-timber uses?	Greater than 0 acres of timberland converted to non-timber use without approval					
2.1.5 Laguna Plant Upgrade		Disinfection and diversion improvements would be contained within the existing LTP and would not	==	==	None needed	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
	of a Timberland Conversion Permit or an Exemption	convert timberlands. No impact would result.				
6. Will the Project cause damage to adjacent vineyards by increasing glassy-winged sharpshooter populations?	Greater than 0 plants not locally grown or purchased from nurseries with approved inspection programs					
<i>2.1.6 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would be contained within the existing LTP and would not increase populations of glassy-winged sharpshooter. No impact would result.	==	==	None needed	Yes
Geology, Soils and Seismicity						
1. Will the Project be located within an area of unstable slope conditions?	Location of facilities in area mapped as Mostly Landslides or Many Landslides					
<i>3.1.1 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would be located within the existing LTP in an area designated <i>Flat Land</i> . No impact would result.	==	==	None needed	Yes
2. Will the Project be subject to ground rupture due to location near a surface trace of an active fault?	Any portion of facilities within an Alquist-Priolo Earthquake Fault Zone					
<i>3.1.2 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would not be located within an Alquist-Priolo Earthquake Fault Zone. No impact would result.	==	==	None needed	Yes
3. Will the Project be located in areas with soils and groundwater conditions	A rating of High or Very High for liquefaction for					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
that are susceptible to liquefaction during an earthquake?	program facilities except irrigation pipes					
3.1.3 Laguna Plant Upgrade		Disinfection and diversion improvements would be located at the existing LTP in areas with Very Low liquefaction susceptibility. The impact would be less than significant.	○	○	None needed	Yes
4. Will the Project induce seismicity?	Ground shaking effects of Modified Mercalli intensity V or greater increasing in frequency by 20% or more					
3.1.4 Laguna Plant Upgrade		Disinfection and diversion improvements would not induce seismicity. No impact would result.	==	==	None needed	Yes
5. Will earthquake-induced strong ground shaking damage Project facilities?	Construction not in conformance with requirements of the Division of Safety of Dams or applicable building codes					
3.1.5 Laguna Plant Upgrade		Disinfection and diversion improvements would be built in accordance with applicable building codes, and designed and built to resist damage from Very Strong Shaking. No impact would result.	==	==	None needed	Yes
6. Will the Project cause off-site water-related erosion?	Construction not in compliance with NPDES, Division of Safety of Dams, or building and grading codes					
3.1.6 Laguna Plant Upgrade		The IRWP Project includes preparation of a Storm Water Pollution Prevention Plan (Project Measure 3.2.3), which would include measures to contain water and prevent excess run-off during installation. The impact would be less than	○	○	None needed	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
		significant.				
7. Will Project be exposed to damage due to expansive soils?	Any construction inconsistent with standard engineering practices					
3.1.7 Laguna Plant Upgrade		Disinfection and diversion improvements would be located at the existing LTP in soils with moderate to high shrink-swell hazards. The IRWP Project includes implementation of standard engineering methods for expansive soils (Project Measure 3.2.6). No impact would result.	==	==	None needed	Yes
8. Will Project be exposed to damage due to construction on corrosive soils?	Any construction inconsistent with standard engineering practices					
3.1.8 Laguna Plant Upgrade		The disinfection and diversion improvements would not be located on corrosive soils. No impact would result.	==	==	None needed	Yes
9. Will the Project be an incompatible land use type in the MRZ-2 classification, designated quarry area, or in The Geysers?	a. Greater than 0 acres of MRZ-2 land; b. Greater than 0 acres of quarry site designated by the ARM plan; c. Greater than 0 acres of Geysers developed in incompatible uses					
3.1.9 Laguna Plant Upgrade		Disinfection and diversion improvements are not located in an area classified as MRZ-2, a quarry area or The Geysers. No impact would result.	==	==	None needed	Yes
10. Will the Project cause a	Any alteration of					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
substantial adverse change to a hot spring or other unique geologic feature?	a unique geologic feature					
<i>3.1.10 Laguna Plant Upgrade</i>		No unique geologic features are located in the vicinity of the disinfection and diversion improvements. No impact would result.	==	==	None needed	Yes
Surface Water Hydrology						
1. Will the Project cause streambank erosion?	Greater than 2% increase in the average stream power when the average channel velocity exceeds erosion threshold velocities for maximum daily flow in the wet year type					
<i>4.1.1 Laguna Plant Upgrade</i>		Disinfection and diversion improvements would be located within existing paved or compacted gravel areas which are not pervious. Post construction stormwater within the area of the proposed facilities would be collected in the proposed stormwater facilities and routed to the same outfall at the same pre-existing volume. Impact would be less than significant.	⊙	○	None needed	Yes
2. Will the Project cause flooding?	Greater than 0.1 foot increase in the 100-year flood elevation for maximum daily flow in the wet year type					
<i>4.1.2 Laguna Plant Upgrade</i>		See 4.1.1 above	⊙	○	None needed	Yes
Groundwater						
1. Will the Project degrade groundwater quality at existing or future drinking	Nitrate levels in groundwater greater than 10					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
water wells, resulting in a public health hazard?	mg/L nitrate as nitrogen (which corresponds to 45 mg/L nitrate); travel time less than 6 months or distance to the closest domestic well less than 500 feet	Trenching and excavation of the disinfection and diversion improvements during construction may encounter groundwater and locally increase turbidity in groundwater. No long-term changes would occur as no water would be injected or extracted and no change in the amount of impervious surfaces would occur. The impact would be less than significant.	○	○	None needed	Yes
<i>5.1.1 Laguna Plant Upgrade</i>						
2. Will the Project cause groundwater mounding or increase groundwater levels that cause surface water discharge in a non-stream environment?	Groundwater that is raised to within 6 feet of the surface	Disinfection and diversion improvements would not inject or extract water from the groundwater and no change in the amount of impervious surfaces would occur. The impact would be less than significant.	○	○	None needed	Yes
<i>5.1.2 Laguna Plant Upgrade</i>						
3. Will the Project lower groundwater levels at existing wells?	Greater than 0 wells subject to lower groundwater levels	See 5.1.2.	○	○	None needed	Yes
<i>5.1.3 Laguna Plant Upgrade</i>						
4. Will the Project lower groundwater levels in areas that could have been developed for future water	Greater than 0 parcels subject to lower groundwater					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
supply?	levels					
5.1.4 Laguna Plant Upgrade		Disinfection and diversion improvements would not utilize groundwater. The potential for groundwater dewatering during construction would be temporary and localized to the immediate area of construction. The impact would be less than significant.	○	○	None needed	Yes
Surface Water Quality						
1. Will the Project cause numeric-based criteria to be exceeded?	Numeric-based criteria					
6.1.1 Laguna Plant Upgrade		Disinfection and diversion improvements would not result in new direct or indirect discharge to surface waters or dam seepage. No impact on water quality would result.	==	==	None needed	Yes
2. Will the Project cause narrative-based criteria to be exceeded?	Narrative-based criteria					
6.1.2 Laguna Plant Upgrade		Disinfection and diversion improvements would not result in new direct or indirect discharge to surface waters or dam seepage. No impact on water quality would result.	==	==	None needed	Yes
3. Will Project construction and operation result in a substantial degradation of surface runoff quality?	Failure to implement effective, reasonable and appropriate measures					
6.1.3 Laguna Plant Upgrade		Construction activities would disturb soils and utilize construction materials that may potentially degrade stormwater runoff if not properly managed. The IRWP Project includes measures to	○	○	None needed	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
		reduce construction-related water quality impacts, including Project Measures 3.2.2, Revegetate Temporarily Disturbed Sites, 3.2.3, Storm Water Pollution Prevention Plan, and 3.2.9, Protect Creeks from Toxic Discharge. Implementation of required project measures would reduce potential water quality impacts to less than significant.				
4. Will the Project result in non-attainment of established TMDLs?	Total nitrogen – 265,700 lbs Ammonia – 35,100 lbs					
6.1.4 Laguna Plant Upgrade		Disinfection and diversion improvements would not result in new direct or indirect discharge to surface waters or dam seepage. No impact would result.	==	==	None needed	Yes
Public Health and Safety						
1. Will the Project expose the public to chemicals, radionuclides, pathogenic viruses, bacteria, or other disease organisms at concentrations detrimental to human health?	Proposed measures not in compliance with California Title 22 regulations for the use of recycled water or the treatment plant's NPDES permit					
7.1.1 Laguna Plant Upgrade		Disinfection and diversion improvements would not result in the release of recycled water to the environment. No impact would result.	==	==	None needed	Yes
2. Will the Project expose workers or the public to hazards from a known hazardous waste site?	Ground disturbance near a hazardous waste release site(s)					
7.1.2 Laguna Plant Upgrade		Disinfection and diversion improvements would	==	==	None	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
		not affect or be affected by hazardous materials/wastes issues at the LTP, as no such areas of contamination are known to be present in the vicinity of the construction area. No impact would result.			needed	
3. Will the Project increase potential exposure of the public to hazardous materials due to a chemical release during their routine transport, use, storage or disposal?	Increase in transport, use, storage or disposal of hazardous materials not in accordance with State and federal hazardous materials or waste regulations. Use of acutely hazardous materials or hazardous emissions within ¼ mile of a school					
7.1.3 Laguna Plant Upgrade	Use of heavy machinery, vehicles or equipment; creation of accessible excavations (trenches, pits, or borings);	Disinfection and diversion improvements would not increase the use of hazardous materials, such as hypochlorite. The Hazardous Materials Management Plan would require updating to reflect any changes to material use and storage, which is included as part of the project (Project Measure 3.2.10). The impact would be less than significant.	○	○	None needed	Yes
4. Will the Project expose the public to safety hazards associated with operation of heavy machinery, vehicles, or equipment; or creation of accessible excavations (trenches, pits, or borings);	Use of heavy machinery, vehicles or equipment; creation of accessible excavations (trenches, pits, or borings);					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
or creation of an accessible open body of water?	open body of water in public areas not in accordance with State construction safety regulations					
7.1.4 Laguna Plant Upgrade		Construction of the disinfection and diversion improvements would take place within the LTP and would not create construction safety hazards for the public or open bodies of water. No impact would result.	==	==	None needed	Yes
5. Will the Project expose the public to a flooding hazard?	Increased risk of inundation due to proposed element(s) not in compliance with State’s dam safety standards					
7.1.5 Laguna Plant Upgrade		Disinfection and diversion improvements would not result in the construction or modification of dams. No impact would result.	==	==	None needed	Yes
6. Will the Project expose people or structures to a risk of loss, injury or death involving wildland fires?	Operation of the IRWP not in compliance with the State’s Fire Safe Regulations					
7.1.6 Laguna Plant Upgrade		Disinfection and diversion improvements would not occur in wildland areas that are at increased risk of fire. No impact would result.	==	==	None needed	Yes
7. Will the Project increase the potential exposure of the public to disease vectors (i.e., mosquitoes)?	Creation of mosquito habitat					
7.1.7 Laguna Plant Upgrade		Disinfection and diversion improvements would not create potential mosquito habitat. No impact would result.	==	==	None needed	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
8. Will the Project create a safety hazard for people residing or working near a public or private airport or airstrip?	Construction or structures not in compliance with airport land use policies					
7.1.8 Laguna Plant Upgrade		Disinfection and diversion improvements would be constructed within the footprint and height of the existing LTP and would not create a safety hazard for people residing or working near an airport. Additionally, the improvements are not located within an airport land use plan or within two miles of a public or private airport. No impact would result.	==	==	None needed	Yes
Biological Resources						
1. Will the Project cause loss of individuals, or loss of critical habitat, or loss of occupied habitat of endangered, threatened, or rare species of plants and animals?	Greater than 0 individuals; 0 acres of habitat, or 0 linear feet of stream habitat					
8.1.1 Laguna Plant Upgrade		Disinfection and diversion improvements are not located within habitat for California tiger salamander (CTS). The improvement area was inspected by a qualified biologist in September 2020 and no burrows (used by CTS for hibernation) were found. The improvement area does not provide suitable upland habitat for CTS. No rare or endangered plant species were found during seasonally-appropriate surveys conducted in the	⊙	==	None needed	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
		improvement area. No streams or other suitable aquatic habitat occurs at the proposed site for improvements, and the improvements would have no impact to fish or other aquatic life. No impact would result.				
2. Will the Project cause loss of individuals of CNPS List 2, 3, or 4 plant species?	Greater than 15% of known populations in Sonoma/Lake Counties for CNPS List 2, 3 and 4 plant species					
8.1.2 Laguna Plant Upgrade		No CNPS list 2, 3, or 4 plant species were found during seasonally-appropriate surveys conducted in the improvement area. No impact would result.	⊙	==	None needed	Yes
3. Will the Project cause loss of active raptor nest sites?						
8.1.3 Laguna Plant Upgrade	Greater than 0 active nest sites lost	Several raptor species may nest in trees near the area of the proposed disinfection and diversion improvements. Construction activities near a nest during the breeding season may cause adult birds to abandon their nest. As a result, there may be impacts to nesting raptors if construction occurs near trees occupied by raptors during the breeding season. Implementation of Mitigation Measure 3.4.1 would reduce the impact to less than significant.	⊙	⊙	3.4.1, Protect Active Raptor Nests	Yes
4. Will the Project cause loss of animals designated as a federal candidate species, a California fully protected species, or a California	Greater than 0 individuals or occupied rookeries, nests, dens, roost sites,					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
species of special concern?	or burrows lost					
8.1.4 Laguna Plant Upgrade		Red-shouldered hawk, red-tailed hawk, white-tailed kite, American kestrel, barn owl, great-horned owl, and northern harrier may nest near the construction area for the improvements. Construction activities during the nesting season may cause adult birds to abandon their nest. As a result, impacts to nesting birds may occur if construction occurs near nests during the nesting season. Implementation of Mitigation Measure 3.4.1 would reduce the impact to less than significant.	⊙	⊙	3.4.1, Protect Active Bird Nests	Yes
5. Will the Project cause permanent loss of native special-status plant communities such as those designated in the California Natural Diversity Data Base as "rare" or in local tree ordinances?	Greater than 0.10 acre for terrestrial or special status native plant communities lost					
8.1.5 Laguna Plant Upgrade		Disinfection and diversion improvements would not impact native, special-status plant communities or heritage trees. No such communities or trees are located at the LTP. No impact would result.	==	==	None needed	Yes
6. Will the Project substantially block or disrupt major migration or travel corridors between essential resource areas for native animals?	Greater than 0 corridors between essential resource areas for native					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
8.1.6 Laguna Plant Upgrade	animals substantially blocked or disrupted	Disinfection and diversion improvements would not block or disrupt migration or travel corridors, as no such corridors are located at the LTP. No impact would result.	==	==	None needed	Yes
7. Will the Project result in ecological risk to plant and animal populations (i.e., acute or chronic toxicity and bioaccumulation)?	Ecological Quotient greater than 10					
8.1.7 Laguna Plant Upgrade		Disinfection and diversion improvements would not release recycled water to the environment where it could have an ecological risk to native plant or animal populations. No impact would result.	==	==	None needed	Yes
8. Will the Project cause a decrease in streamflows, affecting aquatic habitat or aquatic life downstream from proposed dam sites?	Greater than 0 linear feet of stream habitat where 20% decrease in wet season streamflow or any decrease in dry season streamflow occurs					
8.1.8 Laguna Plant Upgrade		This evaluation criterion relates only to the IRWP Storage component. It is not applicable to the Laguna Plant Upgrade component. No impact would result.	==	==	None needed	Yes
Jurisdictional Wetlands						
1. Will the Project fill jurisdictional wetlands or other waters of the U.S.?	a) Greater than 0 acre of jurisdictional					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
9.1.1 Laguna Plant Upgrade	wetlands b) Greater than 0 linear miles of other jurisdictional waters	Disinfection and diversion improvements would replace an existing stormwater inlet located in a seasonal wetland. The IRWP Project includes revegetating temporarily disturbed areas (Project Measure 3.2.2). The proposed improvements would not increase permanent fill in jurisdictional wetlands. However, temporary disturbance would occur. Impacts would be less than significant.	⊙	○	None Needed	Yes
2. Will the Project alter the bed and banks or adjacent riparian habitat of a state stream, lake, or other wetland?	a) Greater than 0 acre of jurisdictional wetlands b) Greater than 0 linear miles of other jurisdictional waters					
9.1.2 Laguna Plant Upgrade	See 9.1.1 above	See 9.1.1 above	⊙	⊙	None needed	Yes
Transportation						
1. Will Project traffic cause congestion on local roadways?	a) Number of trips generated that would exceed available roadway capacity					
10.1.1 Laguna Plant Upgrade	b) Increase in traffic due to operational and maintenance activities	Construction of the disinfection and diversion improvements would temporarily increase traffic along Llano Road, though the traffic levels would be distributed over the course of a given construction day and would not result in an exceedance of the available capacity of Llano Road. Following construction, the improvements would not require additional maintenance staff or	○	○	None needed	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
	resulting in LOS below standards of local jurisdictions – in Sonoma County the threshold is LOS D	generate new operational trips. The impact would be less than significant.				
2. Will Project construction cause traffic delays, transit delays, delays for bicycles and pedestrians and delays for emergency vehicles?	Greater than 0 miles of temporary lane or roadway closures					
10.1.2 Laguna Plant Upgrade	resulting in reduction in traffic capacity	No lane closures would be required for the disinfection and diversion improvements. No impact would result.	○	==	None needed	Yes
3. Will Project construction restrict access to residences, businesses, or public facilities?	Greater than 0 locations.					
10.1.3 Laguna Plant Upgrade		No restrictions on access to other properties would be required during construction of the disinfection and diversion improvements. No impact would result.	○	==	None needed	Yes
4. Will Project construction increase traffic hazards to motor vehicles, bicyclists, or pedestrians?	Greater than 0 locations.					
10.1.4 Laguna Plant Upgrade		Construction traffic would enter and leave the LTP via Llano Road. Because of the relatively low levels of traffic on Llano Road, no substantial increase in safety hazards would be created. The impact would	○	○	None needed	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
		be less than significant.				
5. Will Project construction traffic damage public or private roadways?	Greater than 0 miles					
10.1.5 Laguna Plant Upgrade		The IRWP Project includes compliance with provisions outlined in required Encroachment and Transportation permits (Project Measure 3.2.15), which would include restoring any damaged road surfaces to existing conditions or better. The impact would be less than significant.	○	○	None needed	Yes
6. Will there be adequate parking for the Project construction activities?	Greater than 0 spaces					
10.1.6 Laguna Plant Upgrade		Parking for construction equipment associated with the disinfection and diversion improvements can be adequately accommodated at the LTP. No impact would result.	○	==	None needed	Yes
7. Will the Project impact residential or commercial parking?	Greater than 0 spaces					
10.1.7 Laguna Plant Upgrade		Disinfection and diversion improvements would not result in the loss of any residential or commercial parking spaces, as construction parking would occur at the LTP. No impact would result.	○	==	None needed	Yes
Air Quality						
1. Will construction of the Project generate emissions that expose people to high levels of dust and equipment exhaust?	Non-compliance with measures recommended by BAAQMD, and Northern					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
11.1.1 Laguna Plant Upgrade	Sonoma Co. APCD	Disinfection and diversion improvements include compliance with dust and exhaust controls (Project Measures 3.2.16, Dust Control Program, and 3.2.17, Equipment Exhaust Control Program), which would reduce impacts to less-than-significant levels.	○	○	None needed	Yes
2. Will Project emissions cumulatively exceed allowable limits or conflict with or obstruct the implementation of the Bay Area Ozone Attainment Plan?	In the jurisdiction of the BAAQMD: greater than 80 pounds/day for ozone precursor pollutants (nitrogen oxides and reactive organic gases) and PM ₁₀ ; and 550 pounds/day of carbon monoxide					
11.1.2 Laguna Plant Upgrade		Disinfection and diversion improvements would not require new employees or new operational trips. The additional energy demand for operation of the new improvements is a small fraction of electricity compared to the remainder of the LTP, and the emissions of PM, CO, ROG and SOx would also be lower than the significance thresholds. The impact would be less than significant.	○	○	None needed	Yes
3. Will the Project expose people to substantial levels of toxic air contaminants?	Probability of contracting cancer for maximally exposed individual (MEI) exceeds 10 in 1 million or exposure to non-carcinogenic					
11.1.3 Laguna Plant Upgrade		Disinfection and diversion improvements include compliance with dust and exhaust controls (Project Measures 3.2.16, Dust Control Program, and 3.2.17, Equipment Exhaust Control Program), which would reduce construction-phase impacts to a less-than-significant level. Operation of the proposed improvements would not result in new	○	○	None needed	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
	toxic air contaminants exceeds a Hazard Index of 1 for the MEI	sources of toxic air contaminants. No operational impact would result.				
4. Will the Project violate or contribute to violation of an ambient air quality standard?						
11.1.4 Laguna Plant Upgrade	Greater than 550 pounds per day of CO	Disinfection and diversion improvements would not require new employees or new operational trips, and would not result in new sources of substantial toxic air contaminants. The improvements would not cause or contribute to a violation of CO air quality standards. No impact would result.	==	==	None needed	Yes
5. Will the Project potentially cause odor impacts?						
11.1.5 Laguna Plant Upgrade	Potential for greater than ten odor complaints in a 90 day period or greater than 1 confirmed or 3 unconfirmed complaints per year averaged over 3 years	Disinfection and diversion improvements would not generate additional odors at the LTP. No impact would result.	●	==	None needed	Yes
6. Will the Project cause permit/ monitoring violations at the Geysers Steamfield?						
11.1.6 Laguna Plant Upgrade	Greater than 0 violations	Disinfection and diversion improvements would	==	==	None	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
		not affect emissions at the Geysers Steamfield. No impact would result.			needed	
7. Will the Project increase greenhouse gas emissions?	Any increase over 2000-2001 levels					
11.1.7 Laguna Plant Upgrade		Operational energy demand for disinfection and diversion improvements is a small fraction of electricity compared to the remainder of the LTP. The new pumps would be used intermittently and be rated for the pumping need and facility lighting would operate by use of photocells with manual on/off switches. The proposed facilities would increase greenhouse gas emissions slightly as a result of energy consumption by pumps and lighting; however, this increase is anticipated to be small and would not result in a substantially more severe significant impact. The impact would be less than significant.	●	○	None needed	Yes
Noise						
1. Will construction or operation of the Project generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	a) Greater than noise level for receiving land use allowable by local ordinance or regulation – Sonoma County operations standard of 50 dBA daytime and 56 dBA nighttime					
12.1.1 Laguna Plant Upgrade		Disinfection and diversion improvements would include new pumps and processes on the southwest portion of the LTP. The replacement disinfection facilities would be located further from	●	●	3.4.3 Constructi on Noise	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
	b) Construction noise greater than 60 dBA Leq daytime, 55 dBA Leq nighttime	residences than existing facilities. The new pumps would be located approximately 1,400 feet from the nearest residence, the noise from which would attenuate below County thresholds prior to reaching the residences. . Construction noise would be reduced through implementation of required construction noise controls. Because the efficacy of Mitigation Measures 3.4.3, Construction Noise Control Measures, cannot be determined at this time, Impacts are considered significant after mitigation for the proposed facilities.			Control Measures	
2. Will Project construction activities result in generation of excessive ground-borne vibration levels?	Greater than 0.5 in/sec peak particle velocity					
12.1.2 Laguna Plant Upgrade		Construction of the disinfection and diversion improvements would not require blasting or other sources of excessive ground-borne vibration levels. No impact would result.	==	==	None needed	Yes
3. Will operation of the Project cause a substantial permanent increase in ambient noise levels above existing levels in the vicinity?	a) Greater than 5 dBA Ldn increase and remaining below “normally acceptable” noise level for affected use					
12.1.3 Laguna Plant Upgrade	b) Greater than 3 dBA Ldn increase exceeding the	Disinfection and diversion improvements would include new pumps and processes on the southwest portion of the LTP. The replacement disinfection facilities would be located further from residences than existing conditions. The new pumps would be located approximately 1,400 feet from the nearest residence. Given the distance,	●	○	None needed	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
	“normally acceptable” level for the affected use	intervening terrain, and the pumps being placed below grade, it is anticipated pump noise would attenuate significantly prior to reaching the residences and therefore not exceed any of the County noise thresholds. Impacts are considered less than significant for the proposed facilities.				
4. Will construction activities and traffic required for the Project result in a substantial temporary or periodic increase in ambient noise levels above existing levels in the vicinity?	Greater than 5 dBA Leq increase in noise above existing ambient noise during daytime or nighttime					
12.1.4 Laguna Plant Upgrade		The majority of construction activities associated with the disinfection and diversion improvements would be on the southwest portion of the LTP, approximately 1,400 feet from the nearest residence. Some construction would occur briefly along the east side and be within 350 feet of residences. Construction and traffic for the proposed facilities would be less intense than that analyzed in the IRWP EIR. Although, under Mitigation Measure 3.4.3, Construction Noise Control Measures, the City would, where feasible, implement construction measures to reduce noise impacts on sensitive receptors, impacts may remain significant.	●	●	3.4.3 Construction Noise Control Measures	Yes
5. Will the Project expose people to noise in the vicinity of a public or private airport?	Any incompatible use within the vicinity of an					
12.1.5 Laguna Plant Upgrade	vicinity of an	Disinfection and diversion improvements would be	==	==	None	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
	airport	located within the LTP, which is not within an adopted airport land use plan or within two miles of a public or private airport. No impact would result.			needed	
Cultural Resources and Paleontology						
1. Will the Project cause a substantial adverse change in the significance of a historical or archeological resource as defined in Title 14, California Code of Regulations §15064.5?	Greater than 0 historical or archaeological resources					
<i>13.1.1 Laguna Plant Upgrade</i>		Subsurface investigations performed for the disinfection and diversion improvements did not identify the presence of historical or archaeological materials or archaeologically sensitive soils. No impact would result.	●	==	None needed	Yes
2. Will the Project have an adverse effect on any historic property that is included in, or eligible for inclusion in, the National Register of Historic Places?	Greater than 0 historic properties					
<i>13.1.2 Laguna Plant Upgrade</i>		The disinfection and diversion improvements would not effect a historic property, as no such properties or resources are located within the LTP or the compost facility where excavated materials would be stored. No impact would result.	●	==	None needed	Yes
3. Will Project disturb any human remains, including	Greater than 0 human remains					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
those interred outside of formal cemeteries?						
13.1.3 Laguna Plant Upgrade		Subsurface investigations performed for the disinfection and diversion improvements did not identify the presence of human remains. No impact would result.	●	==	None needed	Yes
4. Will the Project disturb any Native American human remains, associated grave goods, or items of cultural patrimony?	Greater than 0 human remains, associated grave goods, or items of cultural patrimony					
13.1.4 Laguna Plant Upgrade		Subsurface investigations performed for the disinfection and diversion improvements did not identify the presence of items of cultural patrimony. No impact would result.	●	==	None needed	Yes
5. Will the Project directly or indirectly destroy a unique paleontological resource or site?						
13.1.5 Laguna Plant Upgrade	Greater than 0 occurrences of unique paleontological resources	Although no known paleontological resources are located in the project area, the underlying geologic unit may be paleontologically sensitive. Therefore, it is possible that the disinfection and diversion improvements could affect unknown paleontological resources. Implementation of IRWP EIR Mitigation Measure 3.3.17 would reduce potential impacts to a less-than-significant level.	⊙	⊙	3.3.17, Identification, Evaluation, and Avoidance of Cultural and Paleontological Resources	Yes

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
Visual Resources						
1. Will the Project have a substantial adverse effect on scenic vistas or substantially damage scenic resources including those designated by City or County General Plans, or Caltrans designated Scenic Highways?	Strong visual contrast Permanent visual obstruction					
<i>14.1.1 Laguna Plant Upgrade</i>	Loss or alteration of a specific scenic resource	Disinfection and diversion improvements are similar to the existing LTP facilities and would not create strong visual contrast, obstruct scenic views, or alter a scenic resource. The impact would be less than significant.	○	○	None needed	Yes
2. Will the Project substantially degrade the existing visual character of the site or its surroundings, including views from private residences, high volume travelways, recreation uses areas, or other public use area?	Strong visual contrast Permanent visual obstruction					
<i>14.1.2 Laguna Plant Upgrade</i>	Loss or alteration of a specific scenic resource	Disinfection and diversion improvements are similar to the existing LTP facilities and would not create strong visual contrast, obstruct scenic views, or alter a scenic resource. The impact would be less than significant.	○	○	None needed	Yes
3. Will the Project create a new light source?	Greater than 0 residences					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
14.1.3 Laguna Plant Upgrade	affected	Disinfection and diversion improvements include limited exterior lighting on photocells with manual on/off overrides. The IRWP Project includes implementation of Project Measure 3.2.20, Control of Light and Glare, which would reduce operational impacts to a less-than-significant level. Although not anticipated, nighttime construction may potentially be required for the project. Nighttime light sources would not substantially affect residences as the closest residence to the majority of the construction is approximately 1,400 feet away and shielded by intervening vegetation. Impacts would be less than significant.	⊙	○	None needed	Yes
Public Services, Utilities and Recreation						
1. Will the Project increase demand for police and fire services; water and sewage treatment services; or solid waste disposal facilities to such a degree that accepted service standards are not maintained?	Any additional personnel, equipment or capital facilities required beyond existing or planned capacity					
15.1.1 Laguna Plant Upgrade		The disinfection and diversion improvements would not require additional employees to operate and maintain the new facilities. Response times for police and fire services would not be affected, and service standards would not be affected. The impact would be less than significant.	○	○	None needed	Yes
2. Will the Project increase	Any additional					

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
demand for park and recreation facilities to such a degree that accepted service standards are not maintained, requiring the construction of new facilities?	demand beyond existing or planned capacity					
<i>15.1.2 Laguna Plant Upgrade</i>		The disinfection and diversion improvements would not generate additional solid waste that would need to be transferred to a landfill. No impact would result.	○	==	None needed	Yes
3. Will the Project conflict with wells, septic fields, or water or wastewater utilities?	IRWP component within 50 feet of wells or water lines, or within 10 feet of septic or wastewater lines					
<i>15.1.3 Laguna Plant Upgrade</i>		The disinfection and diversion improvements would not impact private wells, septic fields, or water or other wastewater utilities. No impact would result.	==	==	None needed	Yes
4. Will the Project result in the construction of new or expanded water treatment, wastewater treatment facilities, or storm drainage facilities?	Any new facilities beyond those included in the IRWP					
<i>15.1.4 Laguna Plant Upgrade</i>		The disinfection and diversion improvements would not necessitate the need for additional wastewater, water, or drainage improvements beyond those proposed. No impact would result.	==	==	None needed	Yes
Energy						

Table 5.1 Within the Scope of IRWP Program EIR Checklist

Evaluation Criteria	Significance Threshold	Project Impact	Program Level of Significance after Mitigation	Project Level of Significance after Mitigation	Mitigation Measure	Within the Scope of the Program EIR
1. Will the Project require more energy than providers could deliver?	Need for electric facilities beyond capability of provider to supply					
<i>16.1.1 Laguna Plant Upgrade</i>		The disinfection and diversion improvements would include new pumps that would be more energy efficient than existing pumps located at the LTP, and proposed lighting would be energy efficient, operated by use of photocells with manual on/off switches. Energy providers would be able to provide the minimal increase in electrical demand. The impact would be less than significant.	○	○	None needed	Yes

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