Addendum to the 2020 Initial Study / Mitigated Negative Declaration

Fortuna Wastewater Treatment Plant and Effluent Percolation System Upgrade Project, SCH No. 2020050104

City of Fortuna

12 May 2023

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1. Introduction

1.1 Background

The City of Fortuna Wastewater Treatment Plan (WWTP) is regulated under the North Coast Regional Water Quality Control Board (NCRWQCB) and operates under waste discharge requirements issued by the NCRWQCB in Order No. R1-2017-0005, effective November 1, 2017. Treated effluent from the WWTP is discharged to the Eel River or percolation ponds, depending on the time of year. From May 15th through September 30th, the City is prohibited from discharging treated effluent to the Eel River, and discharges to two percolation ponds, which allow disposal through infiltration into groundwater. The percolation ponds are located approximately 180 feet from the edge of the Eel River. From October 1st through May 14th, treated effluent is discharged into either the percolation ponds or Strongs Creek, a tributary of the Eel River. Studies have shown that there is the potential for hydraulic connection between the existing percolation ponds and the Eel River. The Regional Board has required the City to implement an alternative method of summertime effluent disposal due to potential connectivity during periods when river discharge is not allowed. The Regional Board is also requiring the City to upgrade the treatment system to improve treatment for ammonia and nitrate. As a result, the City must implement alternative methods of effluent disposal or reuse during the period May 15th through September 30th and upgrade the treatment system.

The City obtained funding through the Clean Water State Revolving Fund (CWSRF) for planning of the Wastewater Treatment and Effluent Percolation System Upgrade Project (project). The objective of the project is to address compliance issues related to the disposal of treated effluent and construct a new disposal system to replace the historic May 15th through September 30th use of the WWTP percolation ponds. This will avoid the potential connection to the Eel River during the discharge prohibition period.

The City is planning on improvements to the WWTP that includes upgrade of the WWTP within the existing developed site to add Biological Nutrient Removal (BNR) and development of a treated effluent subsurface percolation facility (percolation field) on the opposite (western) side of the Eel River. Additionally, treated effluent would be pumped from the existing WWTP under the Eel River through a new, directionally-drilled pipeline.

The Notice of Determination for the adopted Mitigated Negative Declaration (2020 MND) and Mitigation Monitoring and Reporting Program and approved the WWTP and Effluent Percolation System Upgrade project (project) was filed on July 15, 2020. Since adoption of the 2020 MND, the project design has been modified. Modifications are limited to improvements at the WWTP and include flow equalization system and upgrades to the existing storage ponds, a new phosphorus removal system, new backup generator, upgrades to the secondary and primary clarification system, upgrades to the anaerobic digester and associated systems, new solar panels and updates to the Supervisory Control and Data Acquisition (SCADA). Additionally, the project study area has been updated to identify the roadway anticipated to be used for site access and the full footprint of the existing WWTP; however, the project design footprint (staging and stockpiling, pipeline staging, infiltration area, WWTP upgrades, and directional drilling locations) would not be modified from that used in the 2020 MND. The proposed modified project study area is provided in Figure 1.

The City has evaluated the changes in the project design along with the circumstances surrounding the project pursuant to the California Environmental Quality Act (CEQA). The changes to the project design have been evaluated and measured against the standards set forth in CEQA Guidelines Section 15162 which outlines the circumstances under which a CEQA Lead Agency is required to prepare a Subsequent MND. Elements requiring the preparation of a Subsequent MND have not been identified, as the changes in the project design along with the circumstances surrounding the project do not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects requiring new mitigation measures beyond those previously addressed in the 2020 MND. Under CEQA Guidelines Section 15164, a CEQA Lead Agency may prepare an Addendum to a previously adopted negative declaration to analyze changes in a project, or in circumstances surrounding a project, where the record indicates that a subsequent negative declaration is not required. Therefore, an Addendum to the 2020 MND has been determined to be the appropriate CEQA document.

This Addendum reflects the analysis of the City as the CEQA lead agency. Further, it demonstrates that the environmental analysis, impacts, and mitigation requirements identified in the 2020 MND remain substantively unchanged by the minor changes to the project described herein. The project modifications do not result in a new significant impact or substantial increase in the severity of a previously identified significant impact, and therefore do not exceed the level of impacts identified in the 2020 MND.

Per CEQA Guidelines Section 15164(c), an Addendum need not be circulated for public review. Per CEQA Guidelines Section 15164(d), the decision-making body shall consider an Addendum prior to making a decision on the project. Accordingly, this Addendum, along with the 2020 MND, will be considered by the decision-making bodies prior to any future decision on the project. This Addendum, along with the previous environmental analyses, is on file with and may be obtained from the City of Fortuna, 621 11th Street, Fortuna CA 95501.

1.2 Framework for Evaluation of Project Modifications

As directed by CEQA Guidelines Section 15162, when an MND has been adopted for a project, no subsequent MND shall be prepared, unless one or more of the following circumstances occur:

- 1. Substantial changes are proposed in the project which will require major revisions of the previous MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken
 which will require major revision of the previous MND 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 MND was adopted, shows any of the following:
 - a. The project will have one or more significant effects not discussed in the previous MND;
 - Significant effects previously examined will be substantially more severe than shown in the previous MND;
 - 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 MND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The changes in environmental impacts due to modifications in the project or changed conditions have been evaluated and measured against CEQA Guidelines Section 15162 standards set forth above. The environmental analysis is provided in Section 3.

2. Changes to Project Since 2020 MND

Section 1.6.5 of the 2020 MND described the WWTP treatment upgrades, including construction of a new aeration basin distribution box, motorized inlet valves, supplemental carbon storage tank, demolition of some of the existing compost storage and construction of new construction storage, construction of a new waste activated sludge (WAS) and filtrate equalization (EQ) tanks, converting the existing WAS and filtrate EQ tanks to expanded aeration tanks, ultraviolet (UV) disinfection, and other actions. The section would be revised to include:

- Additional upgrades to the Flow Equalization System
- Additional upgrades to the existing storage ponds
- New phosphorus removal system
- New backup generator
- Upgrades to the secondary and primary clarification system
- Upgrades to the anaerobic digestor and associated systems
- New solar panels and
- SCADA upgrades

The full proposed revised text for Section 1.6.5 is provided below.

1.6.5 WWTP Treatment Upgrades: Non-Proprietary Biological Nutrient Removal (BNR) Improved Secondary Treatment and Ultraviolet Disinfection

The City is required to meet effluent targets per the NPDES permit issued by the Regional Board. The City's NPDES permit currently required the City to upgrade the treatment system for improved removal of ammonia and nitrate. The City is currently proposing to add Biological Nutrient Removal (BNR) to the existing treatment train, which could include converting the aeration basins to the Modified Ludzack Ettinger (MLE) process or modifying tankage onsite to implement a 4-stage bardenpho system. The exact BNR method will be determined during the design process, and regardless of the system selected overall impacts to the plant would be the same. Regardless of the type of BNR system selected, both option would also require modifying the waste activated sludge (WAS) and filtrate equalization (EQ) basins.

A phased construction approach would be used for the WWTP upgrades to allow the WWTP to stay in operation during construction. The construction to modify the WWTP to include the BNR process would generally consist of the following elements:

- Construction of a new aeration basin distribution box
- Sequentially converting aeration basins one at a time
- Implementing new dissolved oxygen (DO) control for each new basin as it comes online
- Installation of motorized inlet valves
- Connecting each basin to new distribution box as it is brought online
- Building an optional supplemental carbon storage tank

The upgrade to the WAS and filtrate EQ basins includes the following:

- Demolition of some of the existing compost storage and construction of new compost storage
- Construction of new WAS and filtrate EQ tanks
- Connection of existing WAS and filtrate piping
- Converting existing WAS and filtrate EQ tanks to expanded aeration tanks
- Aligning the new aeration tanks with the existing three aeration basins
- Connecting the expanded aeration basins in sequence with the corresponding BNR tanks

Conversely, if during design it is determined that new tankage is necessary beyond the existing footprint, the tanks could be constructed and a switchover could occur that the time of completion.

WWTP treatment upgrades may also include a number of additional improvements depending on overall project funding. The additional improvements could include:

- UV disinfection (If UV disinfection is implemented, iron that is present in the treated effluent can foul the UV bulbs and reduce the effectiveness over time. Therefore, an aluminum-based metal coagulant. The UV disinfection system may also require the installation of a post-secondary filtration system)
- A phosphorus removal system (chemical or biological)
- New pumps and piping to convert the existing raw effluent overflow ponds to an automatic flow equalization system
- Improvements to the primary and secondary clarification system
- Improvements to the anaerobic digester gas treatment system
- Updates to the WWTP SCADA system
- Improvements to the plants electrical system, including possible solar panels and a new backup power generator

2.1 Construction Schedule

The 2020 MND anticipated construction activities to occur over an eight-month construction window during a single construction season (2021, 2020, or 2023). Construction has not yet occurred.

2.2 Changes in Circumstances

No substantial changes to circumstances have occurred since adoption of the 2020 MND. The project funding sources, applicable regulatory requirements, and surrounding existing environment remain consistent with the conditions existing at adoption of the 2020 MND.

3. Analysis of Potential Environmental Effects

The following discussion analyzes the likelihood of the project changes, as described in Section 2, to result in new or substantially more significant effects, or the need for new mitigation measures as compared to those studied in the 2020 MND.

3.1 Aesthetics

The project modifications do not require revisions to the evaluation of Aesthetic Resources. The project modifications would be located within the WWTP facility and would be consistent with the existing visual character of the WWTP. Construction of the project would not introduce any new sources of light. The project changes would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2020 MND.

3.2 Agricultural and Forest Resources

The project modifications do not require revisions to the evaluation of Agricultural and Forest Resources. The location of the project is essentially unchanged from that evaluated in the 2020 MND, and there are no agricultural and forest resources in the project area that would be affected by the project modifications details in this Addendum. The project changes would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for agricultural and forest resources than previously addressed in the 2020 MND.

3.3 Air Quality

The modified project remains consistent with and does not conflict or hinder implementation of the North Coast Unified Air Quality Management District's (NCUAQMD) adopted Particulate Matter Attainment Plan with incorporation of Mitigation Measure AIR-1. Mitigation Measure AIR-1 (Dust Control) from the 2020 MND would remain applicable, requiring implementation of protective measures during construction activities to reduce the potential for adverse dust generation. Mitigation Measure AQ-1 would adequately address potential air quality impacts during construction. As the construction equipment and duration would remain essentially the same as that evaluated in the 2020 MND, the project changes would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2020 MND.

3.4 Biological Resources

The project modifications do not require revisions to the evaluation of Biological Resource. The location of the project is essentially unchanged from that evaluated in the 2020 MND. Project modifications are restricted to the WWTP facility, and there are no changes to the project components that would occur outside of the WWTP (such as the proposed infiltration area or directional drilling). Mitigation Measure BIO-1 (Protect Special Status Plants) from the 2020 MND would remain applicable to the modified project, requiring measures to protect special status plants through preconstruction surveys, avoidance of locations of special status plant populations, and compensatory conservation activities if special status plant populations detected where construction would have unavoidable impacts.

The footprint of the project is essentially unchanged from that evaluated in the 2020 MND. The intensity and duration of construction remain the same, and the modified project does not involve any new construction activities adjacent to or under the Eel River. The following mitigation measures would remain applicable:

- Mitigation Measure BIO-1 (Protect Special Status Plants),
- Mitigation Measure BIO-2 (Protect Special Status Amphibians and Reptiles),
- Mitigation Measure BIO-3 (Protect Special Status, Migratory, and Nesting Birds),
- Mitigation Measure BIO-4 (Protect Special Status Bats),
- Mitigation Measure BIO-5 (Compensatory Mitigation for Sensitive Natural Communities),
- Mitigation Measure BIO-6 (Avoidance and Minimization Measures to Protect Juxtaposed Wetlands),
- Mitigation Measure BIO-7 (Compensate for Loss of Wetlands and Waters),
- Mitigation Measure HWQ-1 (Implement Best Management Practices to Protect Water Quality)
- Mitigation Measure HWQ-2 (Development of a Horizontal Directional Drilling Hydrofracturing Contingency Plan)

The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for biological resources previously addressed in the 2020 MND.

3.5 Cultural Resources

Mitigation Measure CR-1 (Protect Archaeological or Tribal Cultural Resources during Construction) and Mitigation Measure CR-2 (Minimize Impacts to Unknown Archaeological Resources or Human Remains if Encountered) from the 2020 MND would remain applicable to the modified project, providing required procedures to address discovery of any unanticipated resources consistent with appropriate laws and requirements. The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2020 MND.

3.6 Energy

As with the 2020 project, the modified project would require temporary energy use in connection with project construction. The modified project would include installation of an emergency backup generator, which would require a nominal amount of fuel for periodic testing and maintenance pursuant to regulatory requirements. However, the modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for energy previously addressed in the 2020 MND.

3.7 Geology & Soils

The project modifications do not require substantial revisions to the evaluation of geology and soils. The project site is unchanged from that evaluated in the 2020 MND, and there are no changes to the risks associated with faults, ground shaking, liquefaction, landslides, expansive soils, or septic systems. Mitigation Measure GEO-1 (Inadvertent Discovery of Paleontological Resources) from the 2020 MND would remain applicable to the modified project, requiring measures to protect paleontological resources if discovered during construction. The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2020 MND.

3.8 Greenhouse Gas Emissions

The project modifications do not require substantial revisions to the evaluation of greenhouse gas emissions. The intensity and duration of construction would be essentially unchanged from that evaluated in the 2020 MND, other than the project would begin construction in 2024 as opposed to 2022. Since adoption of the 2020 MND, the California Air Resources Board has updated the Climate Change Scoping Plan. The recommended measures in the 2022 Scoping Plan are broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of individual projects. The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for greenhouse gas emissions than previously addressed in the 2020 MND.

3.9 Hazards and Hazardous Materials

The project modifications do not require substantial revisions to the evaluation of hazards and hazardous materials. The intensity and duration of construction and the types of materials to be utilized during construction

would be essentially unchanged from that evaluated in the 2020 MND. An updated search of the Hazardous Waste and Substance Sites List (Cortese List) identified no records of past or present hazardous materials or wastes within or adjacent to the project site. The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects for hazards and hazardous materials than previously addressed in the 2020 MND.

3.10 Hydrology and Water Quality

The project modifications do not require substantial revisions to the evaluation of hydrology and water quality. The footprint has expended modestly within the developed area of the WWTP and would not increase impaction to the Eel River, Strong's Creek, or stormwater runoff. The project changes do not result in physical barriers that would inhibit the existing floodplain characteristics of the Eel River. Mitigation Measure HWQ-1 (Implement Best Management Practices to Protect Water Quality) from the 2020 MND would remain applicable to the modified project, requiring measures to protect soil from eroding during and after construction. Mitigation Measure HWQ-2 (Development of a Horizontal Directional Drilling Hydrofracture Contingency Plan) would continue to remain applicable to the project. The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2020 MND.

3.11 Land Use and Planning

As with the 2020 project the modified project would not physically divide a community. The project modifications would occur within the WWTP facility, which is within the City of Fortuna's land use jurisdiction. The modified project would be consistent with applicable City of Fortuna land use and zoning designations, and General Plan goals. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for land use and planning previously addressed in the 2020 MND.

3.12 Mineral Resources

As with the 2020 project, the modified project is not located on, or would result in the loss of, a known mineral resource. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for mineral resources previously addressed in the 2020 MND.

3.13 Noise

Aside from the projected construction timeline, the intensity and duration of construction would be unchanged from that evaluated in the 2020 MND. The modified project does not require construction work to occur at night, and no new structure demolition, blasting or other excessively noisy construction or operational activities would result. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for noise previously addressed in the 2020 MND.

3.14 Population and Housing

As with the 2020 project, the modified project would not displace existing housing or people. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for population and housing previously addressed in the 2020 MND.

3.15 Public Services

As with the 2020 project, the modified project would not result in a land use that would increase the need for public service. While the modified project would alter the WWTP, such actions would not increase the intensity of the activity in the project area to the point that additional public services are needed. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for public services previously addressed in the 2020 MND.

3.16 Recreation

The project modifications would occur within the WWTP facility. As discussed in the 2020 MND, a dog park is located on Dinsmore Drive south of the Fortuna WWTP. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for recreation previously addressed in the 2020 MND.

3.17 Transportation/Traffic

The modified project would not include new or revised modifications to existing roadways, driveways, sidewalks, or other transportation-related infrastructure. The updated project boundary acknowledges site access to the infiltration area would occur using a portion of Renner Lane; however, no modifications to Renner Lane are proposed. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for transportation/traffic previously addressed in the 2020 MND.

3.18 Tribal Cultural Resources

Mitigation Measure CR-1 (Protect Archaeological or Tribal Cultural Resources during Construction) and Mitigation Measure CR-2 (Minimize Impacts to Unknown Archaeological Resources or Human Remains if Encountered) from the 2020 MND would remain applicable to the modified project, providing required procedures to address discovery of any unanticipated tribal resources. The modified project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects relative to those identified in the 2020 MND.

3.19 Utilities and Service Systems

As with the 2020 project, the modified project would result in the creation of new wastewater treatment infrastructure. The project modification should occur within the site boundaries of the existing WWTP, the environmental effects of which were evaluated as part of the 2020 MND. As with the 2020 project, no additional wastewater infrastructure or expansion of existing facilities beyond those identified in the project description and evaluated in this 2020 MND are required. The modified project does not require water or wastewater services and would not result in an appreciable increase in impervious surfaces and storm water runoff. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for utilities and service systems previously addressed in the 2020 MND.

3.20 Wildfire

The project modifications would occur within the WWTP facility, which is not located in or near a State Responsibility Area (SRA) or lands classified as very high fire severity zones. The modified project would not result in new significant environmental effects or a substantial increase in the severity of effects for wildfires previously addressed in the 2020 MND.

3.21 Mandatory Findings of Significance

This Addendum discusses the topic areas in the sequence as they are addressed in the 2020 MND. This section concludes that the project changes, together with changes in circumstances, are not likely to cause a substantial change in impacts and would not result in new significant impacts relative to the previously adopted 2020 MND, and mitigation measures are available to reduce these impacts to levels of less-than-significant. The project changes would not result in new significant environmental effects or a substantial increase in the severity of effects related to the mandatory findings of significance previously addressed in the 2020 MND.

4. List of Preparers

4.1 City of Fortuna

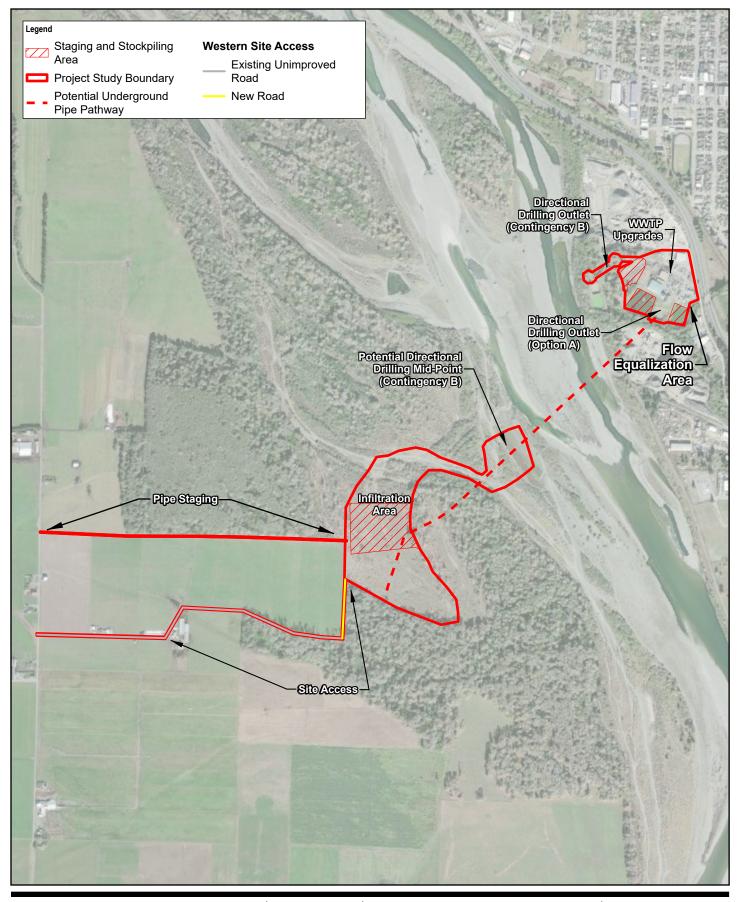
Brendan Byrd, P.E., Public Works Director/City Engineer

4.2 GHD

Andrea Hilton, Senior Environmental Scientist Chryss Meier, Senior Environmental Planner

Attachment 1

Figures





Map Projection: Lambert Conformal Conic Horizontal Datum: North American 1983 Grid: NAD 1983 StatePlane California I FIPS 0401 Feet



City of Fortuna Wastewater Treatment and Effluent Percolation System Upgrade Project

Project No. 11146364 Revision No. Date May 2023

Project Study Area

FIGURE 1

