

**Regional Water Quality Control Board
Central Valley Region
Board Meeting – 16/17 April 2015**

Response to Written Comments for Root Creek Water District, Riverstone Wastewater Treatment Facility, Tentative Waste Discharge Requirements

At a public hearing scheduled for 16/17 April 2015, the Regional Water Quality Control Board, Central Valley Region, (Central Valley Water Board or Board) will consider adoption of Waste Discharge Requirements (WDRs) for the Root Creek Water District, Riverstone Wastewater Treatment Facility (the "Project") in Madera County. The Board opened a hearing on the WDRs at the 4/5 December 2014 Board meeting, and continued the hearing to provide additional time to consider late comments submitted by Mr. Jeffrey Reid with McCormick Barstow LLP on behalf of Mr. Richard Gunner, a neighboring land owner. Mr. Reid's comments raise issues related to the Project's compliance with the California Environmental Quality Act (CEQA).

In response to these comments, Central Valley Water Board staff made revisions to the Tentative WDRs (TWDRs) and prepared an Addendum to the Gateway Village Specific Plan's Environmental Impact Report (the "EIR Addendum"). The Board invited public comments on the revisions made to the TWDRs (Findings 56 through 60) and the EIR Addendum. Additional comments on the Project were received from Mr. Jeffrey Reid, Mr. David McGlasson with Provost and Pritchard Consulting Group, Mr. Loren Harlow with Baker Manock & Jensen, PC, Mr. Christopher Campbell with Baker Manock & Jensen, PC (Chief Counsel for Root Creek Water District), and Mr. Norman Allinder, Director of the Madera County Community and Economic Development Commission. All comments except those from Mr. Jeffrey Reid were supportive in nature, and are therefore not discussed below.

The comments that are critical of the TWDRs and EIR Addendum are summarized below, followed by responses from Central Valley Water Board staff. Based on the comments, Board staff has made some minor changes to the TWDRs. Staff also made a few minor changes to the TWDRs and EIR Addendum to improve clarity and fix typographical errors. Where staff responses below present specific changes made to the TWDRs, additions are in bold text and deletions are in ~~strikeout~~.

COMMENTS FROM MR. JEFFREY REID REGARDING CEQA COMPLIANCE

The Madera County Board of Supervisors, acting as a lead agency under CEQA, certified the Gateway Village Specific Plan Environmental Impact Report (the "EIR") on 11 September 2007; the Central Valley Water Board acted as a responsible agency during the development and approval of the EIR. Subsequent to the certification of the EIR, minor changes were made to the Project, which meant that the Project as proposed to the Central Valley Water Board was different than the Project as analyzed in the EIR.

Mr. Jeffrey Reid's comments suggest that these changes to the Project are substantive and thus require the preparation of a subsequent environmental impact report. To support this assertion, Mr. Reid appends to his comments:

- A memorandum prepared by Mr. Tyler Hunt with AECOM that identifies five allegedly significant changes made to the Project subsequent to the certification of the EIR by the Madera County Board of Supervisors;
- A copy of a Memorandum prepared by Mr. David McGlasson with Provost and Pritchard Consulting Group that discusses the water balance for the nearby Gunner Ranch West Project; and
- Excerpts from the EIR, including the Project's Infrastructure Master Plan, Water Supply Assessment, and resolution from Madera County certifying the EIR.

CEQA only requires preparation of a subsequent EIR to address changes if: (a) substantial changes are proposed in the project which will require major revisions of the EIR or negative declaration; (b) substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the EIR or negative declaration; or (c) new information, which was not known and could not have been known at the time the EIR was certified as complete or the negative declaration was adopted, becomes available. (Cal. Code Regs. tit. 14, § 15162.)

Central Valley Water Board staff considered whether the differences between the Project as evaluated in the EIR and the Project as proposed to the Board were “substantial” and thus required the preparation of a subsequent EIR. After reviewing the changes, Board staff prepared the EIR Addendum, rather than a subsequent EIR. An addendum to an EIR is appropriate when “... only minor technical changes or additions are necessary...” and “none of the conditions ...calling for the preparation of a subsequent EIR or negative declaration have occurred.” (Cal. Code Regs., tit. 14, § 15164.)

Though an addendum need not be circulated for public review (Cal. Code Regs., tit. 14, § 15164, subd. (c).), the Central Valley Water Board invited public comments on the EIR Addendum in order to fully inform its decision making process. Mr. Reid’s subsequent comments on the revised TWDRs and EIR Addendum continue to recommend that the changes in the Project require the preparation of a subsequent EIR. Mr. Reid makes five main points in his argument, which are discussed below, followed by the responses of the Central Valley Water Board staff.

ISSUE 1: Mr. Reid contends that the change in the initial WWTF design from a Plant that would produce secondary disinfected wastewater for reclamation on crops to the production of secondary undisinfectated wastewater discharged to percolation ponds could present a public health risk for pathogens and would reduce reclamation opportunities.

RESPONSE: As proposed in the EIR, the recycled water use area would be planted with tree crops that would produce food for human consumption (currently citrus and pistachios). However, a 2003 memorandum authored by the then California Department of Public Health (now State Water Resources Control Board, Department of Drinking Water) and the California Department of Public Health, Food and Drug Branch, that was intended to supplement Title 22 protections requires that effluent recycled on orchard and vineyard crops meet, at a minimum, secondary standards and be disinfected so that it does not exceed a most probable number (MPN) of total coliform bacteria per 100 milliliters of 2.2 (commonly referred to as “disinfected secondary-2.2 recycled water”). Engineering considerations make reliably producing disinfected secondary-2.2 recycled water infeasible. In addition, meeting this standard at a non-tertiary facility requires large doses of chlorine, which generally increases the salinity of the recycled water and would result in the generation of harmful disinfection byproducts. Based on discussions with Central Valley Water Board staff, the Project proponent altered their proposal and now proposes to discharge secondary undisinfectated wastewater to evaporation/percolation ponds until flows reach a point where it becomes practical to build and operate a tertiary WWTF.

The potential exposure of the public to pathogens as a result of the change will be less than that considered in the EIR, since public access to the ponds will be precluded through the use of fences and signs, while the project considered in the EIR would have discharged non-tertiary treated wastewater to food crops. Further, the potential threat to groundwater from the discharge of undisinfectated wastewater to evaporation/percolation ponds is de minimis since there is

approximately 200 feet to first-encountered groundwater, and most technical references indicate that two to five feet of soil is sufficient to remove pathogens from the wastewater.

This change may reduce the potential reclamation opportunities during the initial stage of the Project. However, to limit the potential loss in reclamation opportunities, the District has proposed to construct a tertiary WWTF that will produce tertiary disinfected wastewater for unrestricted reuse when flows to the initial WWTF approach 300,000 gallons per day rather than the 550,000 gallons per day analyzed in the EIR. Even though the irrigation of crops as proposed in the EIR was impracticable, the recycling as proposed in the TWDRs will be able to occur at an earlier stage in the Project's development. Therefore, the short-term loss in reclamation opportunities for the Project as a result of this change will be less than significant.

ISSUE 2: Mr. Reid contends that the discharge of wastewater to unlined ponds rather than lined ponds as proposed in the EIR would increase the potential environmental impacts to groundwater from harmful nutrients.

RESPONSE: The harmful nutrient in question is nitrogen, specifically nitrogen in the form of nitrate as nitrogen. Domestic wastewater contains total nitrogen at concentrations that, when transformed into nitrate as nitrogen, can percolate through the soil and cause groundwater to exceed the Primary Maximum Contaminant Level (MCL) of 10 mg/L. To mitigate potential impacts to groundwater from the discharge of wastewater to unlined ponds, the District now proposes to provide nitrogen removal to reduce total nitrogen concentrations in the wastewater to less than 10 mg/L for both the initial and tertiary WWTFs. Total Nitrogen will be subject to partitioning and removal in both the unlined ponds and as the effluent percolates to groundwater. As a result, the effluent on reaching groundwater will have a nitrate as nitrogen concentration of less than 10 mg/L, and likely less than 6 mg/L. The District has also added additional measures to reduce effluent salinity and to ensure that the discharge to the ponds meets water quality objectives not considered in the EIR. Thus, with the conditions specified in the TWDRs, the potential threat to the environment as a result of the discharge to unlined ponds will be equal to or less than that proposed in the EIR. In addition, with the nitrogen removal treatment, the overall amount of nitrogen applied by the discharge of recycled water to crops during later phases of the Project will be less than that proposed in the EIR.

ISSUE 3: Mr. Reid contends that the generation of Class B rather than Class A biosolids as proposed in the EIR would entail significant disposal restrictions and present potential public health risks and nuisance conditions.

RESPONSE: In looking at disposal options for its biosolids, the Root Creek Water District determined that landfill disposal was the most viable option. Since the landfill can take Class B biosolids, it was deemed unnecessary to invest the cost required to provide the necessary treatment to meet Class A requirements during the initial phase of the Project. The initial secondary WWTF will generate waste sludge that will be temporarily stored at the WWTF in lined sludge drying beds or in transport bins before being transported off-site for disposal. The temporary storage of Class B biosolids at the WWTF, where public access is precluded, will not increase the potential threat to public health. Further, the TWDRs include specifications that require implementation of treatment and control measures to prevent odor or nuisance conditions from extending beyond the WWTF, and that require that biosolids be disposed of at an

appropriately permitted facility. Therefore, any potential threat to the environment from this change is insignificant.

ISSUE 4: Mr. Reid contends that the percolation of effluent during the initial phase of the development and the storage of recycled water in unlined ponds during the later phases of development will reduce the amount of water available for credit toward the required water balance for the Project. Mr. Reid states that approximately 50% of the effluent that percolates will not reach the groundwater aquifer due to geologic constraints. He estimates that percolation will reduce the amount of water available for recycling by up to 272 acre-feet per year during the time that initial WWTF operates. Over the projected ten year life of the initial WWTF, Mr. Reid assumes that this will result in a deficit of approximately 2,720 acre-feet in the District's water balance. He also estimates that approximately 336 acre-feet per year will be lost from the tertiary WWTF at build out. In his comments, Mr. Reid references a Memorandum prepared by Mr. David McGlasson with Provost and Pritchard regarding the water balance for the nearby Gunner Ranch West Project. Due to a lack of site-specific geologic information, the McGlasson Memorandum estimates as much as 50% of percolated effluent at the Gunner Ranch site may be lost from the aquifer due to geologic constraints. In addition, Mr. Reid states that the Project's reliance on surface water imports to make up for the potential recharge lost due to percolation is unenforceable.

RESPONSE: Mr. Reid's consultant's estimates of how much percolated water would be rendered unavailable are high for a couple of reasons. First, the volumes of wastewater reported above assume that the initial WWTF will discharge at its capacity of 300,000 gallons per day from startup to decommissioning ten years later. If the Project develops like other projects in the area, wastewater flows during the early years of development will be much lower than the capacity of the initial WWTF and will gradually increase over time as the development grows. Thus, the amount of water percolated will be much less than described above and any losses will also be less. The same concept can also be applied to discharges from later phases of the WWTF.

Mr. Reid's application of the 50% reduction of recharge potential for the initial WWTF is not appropriate for this site. The Memorandum regarding the Gunner Ranch West Project, states clearly that the 50% reduction was applied as a conservative estimate, given the lack of site specific investigative work and complex geology of the area that is known to have extensive impermeable layers that could impede percolation and reduce the potential groundwater recharge. The Root Creek Water District has conducted soil borings and installed groundwater monitoring wells in the areas where effluent storage ponds will be constructed. The boring logs do not show evidence of any perched groundwater zones or significant clay layers that could severely impede percolation. It is therefore likely that most, if not all, of the water that percolates from the storage ponds will migrate to groundwater and be available for conjunctive use.

Furthermore, the Water Supply Assessment, which is a part of the certified EIR, includes a groundwater recharge plan intended to eliminate the estimated groundwater overdraft within the District by providing for an average annual recharge of 3,400 acre-feet per year. The groundwater recharge plan depends on groundwater recharge from a variety of sources including in-lieu recharge using imported surface water and reclaimed water to replace groundwater irrigation supplies within the District, direct recharge in dedicated recharge basins, and conjunctive reuse of storm water. As part of this program, the Project proponent has completed construction on the turnout and pipeline from the Madera Lateral 6.2, initiated delivery of surface

water imports in 2014 as part of its in-lieu recharge program, and obtained approval for a “215 Contract” to obtain flood waters from the Friant system when available.

As discussed in the Water Supply Assessment and Infrastructure Master Plan, full utilization of all available sources under its groundwater recharge program would provide the Project with a capacity greater than that needed to meet the District’s commitment to supply an average 3,400 acre-feet of recharge per year. The Water Supply Assessment states that this excess capacity will allow the District the flexibility to select the programs that are most economical and practical to implement at any given time. In addition, the District has a contractual agreement with Paramount Land Company to supply up to 7,000 acre-feet per year of surface water, enough to meet the entire water demand for the Project, as a back-up supply for the Project not included in the water balance presented in the Water Supply Assessment. This additional supply can be used to supplement any shortfalls in its groundwater recharge program in any given year.

The proposed changes in WWTF design and disposal do not change the District’s commitment in the EIR or its ability to eliminate the groundwater overdraft by providing a groundwater recharge capacity of 3,400 acre-feet per year (based on a five year average).

By letter dated 9 March 2015, Mr. Norman L. Allinder, Director of the Community and Economic Development Commission for Madera County, provides Madera County’s opinion that the water supply and recharge measures proposed and studied in the Gateway EIR and adopted by the County are fully enforceable. Madera County will require the Project to provide the specified recharge amount irrespective of the allocation of supply between the various sources available to the District. The minor changes in the WWTF design will not impair the County’s ability to compel Riverstone and the District to provide the required amount of annual recharge.

ISSUE 5: In his comments, Mr. Reid contends that preparation of an Addendum is inappropriate to address these issues since an Addendum does not need to be circulated for public review and that the proposed changes in WWTF design and disposal represent a significant change in the Project from that which was proposed in the EIR and should be addressed in a new or supplemental EIR.

RESPONSE: As discussed in the EIR Addendum and in Board staff responses to the previous issues, the proposed changes in WWTF design and disposal do not introduce any new or significant environmental impacts that were not addressed in the EIR for the Project. In its 9 March 2015 letter described above, Madera County, the approver of the original EIR for the Project, shares its concurrence with this view. Additionally, although an Addendum is not required to be circulated for public comment, the Central Valley Water Board elected to circulate the revised TWDRs and the EIR Addendum for public comment in order to have a more fully informed decision making process. Critical comments were only received from Mr. Reid.

OTHER ISSUES

Mr. Reid notes in his 26 February 2015 comments on the TWDRs and EIR Addendum, Finding 33 in the TWDRs makes an incorrect reference to the contract Agreement with Paramount Land Company to purchase up to 7,000 acre-feet of surface water per year as being a mitigation measure specified in the EIR.

RESPONSE: The EIR and the Infrastructure Master Plan refer to the importation of surface water as a measure intended to mitigate groundwater overdraft within the District and does not list it as a specific mitigation measure for the Project. To clarify this issue Finding 33 has been modified as follows:

“... As a mitigation measure discussed in the Environmental Impact Report **and Infrastructure Master Plan** for the Project, Root Creek Water District **will import surface water from outside of the District’s boundaries, and set up a groundwater recharge program through the use of direct and in-lieu recharge for use in mitigating the estimated groundwater overdraft within the District of approximately 3,400 acre-feet per year. In addition, the District has a contractual agreement with Paramount Land Company to purchase up to 7,000 acre-feet of surface water annually from supplies controlled by Paramount and banked in Kern County as a back-up supply to ensure the Project’s ability to meet its commitments including its groundwater recharge program., and. Imported surface water will be delivered** deliver it via the Madera Canal and Lateral 6.2 to agricultural areas within the District to replace historical groundwater supplies and reduce groundwater overdraft within the District.”