Central Valley Regional Water Quality Control Board

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WDID 5A450105001

COMMENTS REGARDING THE DRAFT ENVIRONMENTAL IMPACT REPORT,
MOUNTAIN GATE AT SHASTA AREA PLAN, CITY OF SHASTA LAKE, SHASTA
COUNTY

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff has reviewed the April 2014 Draft Environmental Impact Report (DEIR) for the proposed Mountain Gate at Shasta Area Plan (Project) situated on approximately 590 acres located in the northeastern corner of the City of Shasta Lake due west of Interstate 5 (I-5) between the Shasta Dam Boulevard interchange (Exit #685) and the Mountain Gate interchange (Exit #687), in Shasta County. Based on information provided in the DEIR, the Central Valley Water Board is submitting the following comments.

Project Background
The existing Project site is vacant with few improvements which include dirt roads, trails and perimeter fencing. Vegetation on the site includes valley oak, blue oak, interior live oak, gray pine, manzanita, and native and introduced grasses. The existing, undeveloped site contains ephemeral and intermittent streams, wetland swales and seasonal wetlands, annual grassland, and oak woodland throughout. The site contains two named creeks, Moody Creek and Rancheria Creek, which flow north to south as well as other unnamed tributaries. Preliminary delineation results indicate a total of 57.82 acres of waters of the United States on the site.

The Project entails dividing 590 acres into 21 large parcels for later re-division to provide up to 1604 residential housing units, 195,584 square feet of nonresidential land uses, and 249 acres of open spaces, parks and trails. Nonresidential land uses are intended to include traditional commercial development, neighborhood parks, a mixed-use urban center, and public services. Wonderland Boulevard will be expanded from the north end of the Project to the south and west of I-5 to Cascade Boulevard to provide roadway access to the Project. In addition, gated access to Black Canyon...
Road will be provided for emergency and pedestrian access. Areas and all uses within the Project will be accessible via linking roadways and trails.

**Wastewater Treatment Facility**
As described in the DEIR, the Project would produce an average influent flow increase of 0.42 million gallons per day (MGD) to the City of Shasta Lake Wastewater Treatment Facility (WWTF) generated from new residential, commercial, and public services. The WWTF is currently permitted under state Waste Discharge Requirements (WDRs) and the National Pollutant Discharge Elimination System (NPDES) permit programs which regulate, amongst other things, the discharge volume and quality of treated wastewater from the facility. Please be advised that the applicant should receive confirmation of available capacity at the WWTF and a formal approval to connect to the City’s sewage collection system prior to discharging untreated wastewater from any areas within the Project.

**Storm Water**
Table 4.7-1, W-(7) of the DEIR states, “Several detention basins are planned in the existing drainage courses. The basins are created using planned road crossings and allow the storm water to stay in the channel.”

Central Valley Water Board staff does not support the proposed in-stream flow control basins (on-line detention basins) to mitigate for project-related increases in peak flows and volumes. In-stream flow control basins can affect the downstream beneficial uses of the surface water, and modifying the stream may affect the ecology of the stream and the beneficial uses it provides to aquatic species. In addition, the proposed in-stream flow control design does not take into account the trapping of coarse sediment. On-line detention basins are very efficient at trapping coarse sediment, creating a “hungry water” situation where water discharged from the basin seeks to replenish the coarse sediment lost to the basin through accelerated channel bed and bank erosion. Moody Creek appears to be in an area where sediment transport is the dominant process, with sediment supply and deposition being secondary processes. Disrupting the transport of coarse sediment through the project area could cause accelerated channel bed and bank erosion downstream and headcutting upstream. The basins would cause the entire reach to readjust to a new equilibrium flow and sediment transport regime. Depending on geology and natural and manmade grade controls, these adjustments (and resulting accelerated erosion) could last decades. In order to replicate existing conditions and preserve the existing flow and sediment supply equilibrium, the designer would need to calculate the sediment trapping efficiency of the basins and reduce the peak flows and volumes by a proportional amount. For example, if the basins trap 80% of the coarse sediment, flows would need to be reduced by approximately 80% below existing conditions. The local and regional impacts from reducing the flows this much are unknown and will have to be disclosed. A better solution is to identify areas where coarse sediment is naturally supplied to the stream channels from the watershed, not building there, and using Low Impact Development
techniques (e.g. bioretention, infiltration, buffer areas) in these areas to manage the increased flows and volumes resulting from the project.

Storm water and surface water flows must be managed to maintain the natural flow and sediment transport regime and maintain water quality. This includes not altering baseline flows in receiving waters, not allowing untreated discharges to occur into existing aquatic resources, and not placing detention basins within aquatic resources. All storm water generated on-site during and after construction and entering surface waters must be pre-treated to reduce oil, sediment, and other urban pollutants. The design and construction of outfalls (e.g. culverts) must minimize impacts to riparian habitat and must avoid impacts to surface waters. Setbacks and buffers must be implemented to achieve the interests listed above and should be sized to protect both water quality and wildlife habitat needs. They must also be sized to take into account the tendency for the Moody Creek system planform to naturally shift over time.

Reclamation
Impact 4.7.3 of the DEIR states, "The proposed project could potentially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volumes or a lowering of the local groundwater table level." Impact 4.10.1.3 of the DEIR states, "Implementation of the proposed project, in combination with cumulative development, would increase the current demand for water supply service. This impact is considered to be cumulatively considerable." In accordance with State Water Resources Control Board Resolution 2009-0011, Policy for Water Quality Control for Recycled Water, Central Valley Water Board Resolution No. R5-2009-0028, Resolution in Support of Regionalization, Reclamation, Recycling and Conservation for Wastewater Treatment Plants, and recent 2014 State of Emergency drought declarations by Governor Edmund G. Brown, the Central Valley Water Board is in support of maximize recycling opportunities for treated wastewater from the WWTF, to the extent practicable. It is anticipated that proposed facility upgrades at the WWTF will substantially improve treatment reliability and overall effluent quality which may enable the applicant to take advantage of new recycling opportunities within the Project.

If you have any questions regarding the above comments, please contact the undersigned at (530) 226-3425 or at the footer address.

[Signature]

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cc list see next page
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