July 2, 2013

US Environmental Protection Agency Region IX

Response to Comments on the Malibu Creek and Lagoon TMDL for Sedimentation and Nutrients to address Benthic Community Impairments

On December 12, 2012, the United States Environmental Protection Agency (USEPA) solicited public comments on the draft Total Maximum Daily Loads (TMDLs) for Malibu Creek and Lagoon. USEPA held a public hearing on the draft TMDLs on January 14, 2013, and accepted public comments through January 28, 2013. The following comments were received after the public comment period closed.

1. *Comments stating that the cost of compliance with the TMDL is estimated to be $307 million in capital costs and $23.5 million annually for operations and maintenance.*

Response: We disagree with these estimated costs for compliance with the TMDLs. Based on the wasteload allocations (WLAs) assigned to the Tapia Water Reclamation Facility (WRF) in the final TMDLs, a new large capital investment is not needed to achieve compliance.

It's our understanding that the cost estimate cited here was developed by the Las Virgenes Municipal Water District (LVMWD) based on their assumption that it would be necessary to install new wastewater treatment operations at the Tapia WRF, including reverse osmosis treatment. LVMWD's assumption was apparently based on their understanding of the draft TMDLs released for public comment on December 12, 2102. We consulted with those who commented on the draft TMDL, including LVMWD, and clarified the expectations for the Tapia WRF. As a result, a WLA of 4 mg/L total nitrogen was assigned to the Tapia WRF for discharges in winter months. Based on the operational information we obtained from the LVMWD, and experience at other wastewater treatment plants across the country which implement equivalent advanced nutrient removal technology, USEPA expects the Tapia WRF will be able to achieve its assigned WLAs without the need for significant new capital investments.

2. *Comments stating the TMDL is being rushed to meet an arbitrary deadline at the expense of scientific rigor and stakeholder input.*

Response: These TMDLs were produced via a deliberate process that has taken into account extensive scientific analyses, included frequent consultation with local stakeholders, and provided numerous opportunities for stakeholder input.

USEPA's work on these TMDLs began in 2010. In January, 2011 we began working with stakeholders at the Malibu Creek Watershed Management Committee, which is made up of all the affected municipalities and many other stakeholder groups in the Malibu Creek watershed. We informed the Committee of our work on these TMDLs, and provided presentations and updates on at least a quarterly basis. We received valuable comments and recommendations from this Committee which helped inform our preparation of the draft TMDL released for public comment on December 12, 2012. Because of the strong public interest, USEPA held a public workshop on the TMDLs on May 1, 2013. We made extensive revisions to the draft TMDLs as a result of the input received from stakeholders.

In preparing these TMDLs, USEPA evaluated all available sources of scientific data, including those from local, state, and federal government agencies and non-governmental organizations. When evaluating these data, we carefully examined the methods used to collect data and laboratory testing protocol to determine the scientific validity of the data, and only used the data that passed our screening. In order to confirm their scientific validity, some of the data sets on biological conclusions were reviewed by scientists at the Southern California Coastal Water Research Project. (Please see sections 7 and 8 of the final TMDL for more details on the scientific analyses utilized in the preparation of this TMDL.)

3. *Comments stating there is an existing 2003 Nutrient TMDL that has not been fully implemented.*

Response: These new TMDLs are necessary to address the impacts to benthic macroinvertebrates in Malibu Creek and Lagoon, which were not addressed by the 2003 Nutrient TMDLs. The health of these organisms is critically important to the ecologic well being of the Malibu Creek Watershed. USEPA concluded that the 2003 Nutrient TMDL will not provide (even when fully implemented) adequate protection of benthic organisms. Unlike the 2003 TMDLs, these newly established TMDLs evaluated all the relevant data, stressors, and causes that could potentially impact the benthic community.

4. *Comments stating that the natural characteristics of the Malibu Creek watershed have largely been dismissed.*

Response: USEPA considered all available data from within the Malibu Creek Watershed in preparing these TMDLs, which included an intensive evaluation of the natural characteristics of the watershed. This included investigations of the characteristics of the Monterey/Modelo Formation and its potential impacts on water quality and aquatic life. Ultimately, the TMDLs established for both sedimentation and nutrients are based on natural conditions of the watershed. The sedimentation TMDLs take into account the natural sediment loads resulting from the sloped topography within watershed and the nutrient TMDLs have been established based on nutrient levels present in natural reference conditions.

5. *Comments stating that USEPA should look at other options, including whether the changes are necessary or if they are simply trying to 'cure nature'. There needs to be good science, communicated well to the public, before spending an amount of money equal to one to two years of a child's college education.*

Response: These TMDLs include extensive analyses of the impacts on benthic organisms that have led USEPA to conclude that establishing these TMDLs are the best option for protecting these ecologically important organisms. As noted in the response to comment 4, these TMDLs take into account the natural geology and other conditions of Malibu Creek, and are not attempting to "cure nature." As noted in the response to comment 2, these TMDLs are based on sound science. (We suggest reviewing sections 7 and 8 of the final TMDLs for an illustration of the scientific approach used.) As noted in the response to comment 1, we disagree with the information that has been circulating about the costs associated with these TMDLs.

6. *Comments stating there is inadequate evidence that the new regulation will reduce algae cover in Malibu Creek.*

Response: USEPA expects that by reducing nutrient loads, over time there will be a reduction in algal cover in Malibu Creek. Section 8.1.7.4 of the final TMDL discusses Stream Algal Data.

7. *Comments stating: Additionally any expenditure on a project that hopefully may cure a perceived contributing factor without knowledge of the % causality of the alleged contributing factor (winter runoff from the Tapia treatment plant) as well as no knowledge based on historical evidence of other sites where the proposed extremely expensive mitigation fixes worked or did not work. At the May 1, 2013 public information meeting EPA expressed a hope (fingers crossed) the mitigation may work. As a minimum there needs to be a small scale model of whatever mitigation fix is executed; for example air frames are tested in wind tunnels.*

Response: The TMDLs assign contributions to all significant sources of nutrients and sedimentation based on our investigations of these sources. For example, the TMDLs conclude that during winter months, the Tapia WRF is responsible for approximately one-third of the nutrient loads. (See section 5 of the TMDL for details of Tapia's relative contribution.) Since the passage of the Clean Water Act, there has been widespread historical evidence of improved water quality resulting from reduced pollutant loads. Regarding the description of "extremely expensive mitigation fixes," please see the response to comment 1 regarding costs. Based on our analyses and conclusions, including the observed un-impacted "good" conditions in portions of the Watershed un-impacted by discharges, USEPA expects that achievement of the targets established by these TMDLs will result in restoration and protection of the impaired benthic community and its habitat.