

**Regional Water Quality Control Board
Central Valley Region
Board Meeting –7 April 2011**

Response to Written Comments on Tentative Waste Discharge Requirements for Tejon Mountain Village, LLC., Tejon Mountain Village, Kern County

At a public hearing scheduled for 7 or 8 April 2011, the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) will consider adoption of Waste Discharge Requirements (WDRs) for the Tejon Mountain Village. The WDRs will regulate dredge and fill activities and construction related storm water discharges in project areas not subject to federal permit requirements. The WDRs were circulated as tentative (TWDRs) on 28 January 2011. This document contains responses to written comments received from interested parties regarding the TWDRs. Written comments from interested parties were required to be received by the Central Valley Water Board by 5 p.m. on 28 February 2011 in order to receive full consideration. Comments were received by the deadline from:

1. Center for Biodiversity (CBD)
2. Tejon Mountain Village, LLC (TMV)

Written comments from the above interested parties are summarized by staff below, followed by the staff response.

CBD COMMENTS

CBD - GENERAL COMMENT 1: CBD asserts that the proposed WDRs do not acknowledge water quality problems with Castac Lake, and do not protect beneficial uses for Castac Lake and Grapevine Creek.

RESPONSE: Because the Tejon Mountain Village project is large and has many components and because the TWDRs relate to only a small part of the project, hereinafter, “PROJECT” generally refers to the entirety of the development proposed by TMV and “project” refers to the issues addressed by the TWDRs. As described by the information in Findings 1, 4, 10, 11, 12, and 13, the subject TWDRs address only discharges associated with dredge and fill activities and storm water construction runoff to isolated waters of the State. These waters of the State do not discharge to Castac Lake. The TWDRs do not directly address the purported water quality problems with Castac Lake because the TWDRs are not designed to regulate activities that result in discharges of waste within the Castac Lake Watershed.

Nonetheless, water quality impacts associated with dredge and fill related activities in waters that discharge to Castac Lake will be regulated by a pending U.S. Army Corps of Engineers (Corps) permit action and will be expected to comply with the 14 January 2010 Water Quality Certification issued by the Executive Officer of this Board. As described in Finding 8 of the TWDRs, the Discharger will also be required to obtain coverage under *State Water Resources Control Board (State Board) Order No. 2009-0009-DWQ [As Amended by Order No. 20101-0014-DWQ], National Pollutant Discharge Elimination System General Permit No. CAS00002, Waste Discharge Requirements For Discharges Of Storm Water Runoff Associated With Construction*

and Land Disturbance Activities (Construction General Permit) for construction related discharges of storm water in the Castac Lake Watershed.

The Discharger submitted three technical reports to this Board that address water quality and flow related impacts associated with dredge and fill activities, construction related storm water discharges, and discharges and ongoing storm water discharges for the entire PROJECT:

1. *Draft Conceptual Wetlands Mitigation and Monitoring Plan* (Mitigation Plan) prepared by Dudek;
2. *Draft Tejon Mountain Village Specific Plan, Water Quality and Hydromodification, Technical Report* (Hydromodification Report) prepared by GeoSyntec; and
3. *Tejon Mountain Village Drainage Report* (Drainage Report) prepared by Stantec.

Both the TWDRs and the Water Quality Certification require that the Discharger implement the mitigation measures and the monitoring program in the Mitigation Plan to protect waters from dredge and fill related discharges. Generally, they require the Discharger to create, enhance, and preserve waters of the State and Waters of the United States to compensate for all discharges of dredge and fill activities associated with the PROJECT. The TWDRs also require the Discharger to monitor the success of its mitigation measures. The specifics of these mitigation measures are described in Findings 19 through 24 of the TWDRs.

Both the TWDRs and the Construction General Permit require the Discharger to implement and maintain best management practices (BMPs) to prevent the discharge of pollutants with storm water to a level that achieves Best Practicable Treatment or Control (Discharge Specifications C.11, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23). Additionally, the Discharger must prepare and implement site specific Storm Water Pollution Prevention Plans (SWPPPs) to ensure all pollutants associated with construction activity are controlled, that all BMPs are implemented and effective, that all non-storm water discharges are properly managed, and that stabilization BMPs are installed to control pollutants and wastes after construction is complete (Discharge Specification C.12).

Finally, the TWDRs require the Discharger to implement the hydromodification control BMPs listed in the Hydromodification Report to preserve the pre-Project flow distribution in project channels (Discharge Specifications 15 and 16).

The Final Environmental Impact Report (Final EIR) approved for the PROJECT also contains mitigation measures requiring construction and maintenance of storm water treatment control structures throughout the entire PROJECT, including the drainage areas around Castac Lake. The TWDRs require the Discharger to implement these mitigation measures for activities downstream of Castac Lake and in other isolated State waters that do not discharge to Castac Lake (Discharge Specification C.8; TWDRs Attachment D).

While Castac Lake sometimes spills to Grapevine Creek, the TWDRs do not regulate these flows. As described above, the TWDRs do ensure protection of beneficial uses from impacts associated with the regulated discharges. The Corps Permit, Central Valley Water Board Water Quality Certification, and the State Board Construction General Permit will protect Castac Lake from impacts associated with regulated discharges to Castac Lake and its upstream tributaries during construction activities.

CBD – GENERAL COMMENT 2: CBD asserts the WDRs will not prevent storm water events from causing overflows of toxic waters from Castac Lake into Grapevine Creek, a jurisdictional water of the State.

RESPONSE: As described above, the TWDRs will only regulate dredge and fill activities and construction storm water related discharges to tributaries of Grapevine Creek downstream of Castac Lake or to waters isolated from Castac Lake. Analogous construction activities and discharges in the Castac Lake Watershed will be regulated by other implements including the aforementioned Corps permit action, the Central Valley Water Board Water Quality Certification, and the State Board Construction General Permit.

With respect to the first part of the comment, CBD is correct; the TWDRs do not directly regulate outflows from Castac Lake to Grapevine Creek. Grapevine Creek is the natural outfall from Castac Lake and, generally speaking, the frequency and duration of outflows from Castac Lake due to storm events is not within the regulatory purview of the Central Valley Water Board as these are drainage issues, not water quality issues. However, as described above, the TWDRs require the Discharger to implement hydromodification measures and monitoring to ensure that pre- PROJECT flow regimes in surface waters regulated by the TWDRs are maintained. This approach is consistent with that taken by State Water Board in its Construction General Permit.

CBD alleges that the water in Castac Lake is toxic. The assertion seems to stem from a Tri-County Watchdog letter to Mr. Craig Murphy of the Kern County Planning Department which cites data from a 2003 presentation by Andrew Komor of Pacific Advanced Civil Engineering (PACE) titled "Monitoring, Modeling, and Management of a 400-acre Natural Lake." The letter indicates that Mr. Komor reported the following concentrations of aluminum (300 parts per billion "ppb" or micrograms per liter "ug/L"), arsenic (>100 ug/L), manganese (>100 ug/L), and zinc (100 ug/L). The Watchdog letter does not provide the context of the citation (e.g., lake level conditions at the time the samples were taken), but a 2006 PACE report entitled *Lake Technical Study, Tejon Ranch Company*, also prepared by Mr. Komor, reports similar data. It is therefore assumed that the Lake was relatively full at the time the data cited in the 2003 presentation was obtained. The presented values exceed the State drinking water Maximum Contaminant Levels for aluminum (200 ug/L, Secondary MCL), arsenic (10 ug/L, Primary MCL), and manganese (50 ug/L, Secondary MCL). There is no MCL for zinc. The MCLs apply to waters with a designated beneficial of municipal/domestic supply (MUN).

As described in Finding 30 of the TWDRs, the designated beneficial uses for Castac Lake and its tributaries and Grapevine Creek are Agricultural Supply; Groundwater Recharge; Industrial Service Supply; Industrial Process Supply; Rare, Threatened, or Endangered Species Habitat; Water Contact Recreation (REC-1); Noncontact Water Recreation; Warm Freshwater Habitat (WARM); and Wildlife Habitat. MUN is not a designated beneficial use of Castac Lake.

As far as surface water uses are concerned, the most stringent water quality objectives associated with the subject metals are those necessary to protect the WARM beneficial uses. The U.S. Environmental Protection Agency (USEPA) acute and chronic aluminum criteria for the protection of aquatic life are 750 ug/L and 87 ug/L, respectively. Given the cyclical nature of the lake and natural high pH and hardness, the chronic aluminum concentration is not applicable. The California Toxics Rule (CTR) acute and chronic criteria for arsenic are 350 ug/L and 150 ug/L, respectively. The CTR acute and chronic criteria for zinc are both approximately 310 ug/L. The USEPA acute and chronic manganese human health criteria for consumption of organisms is 100 ug/L.

With respect to the cited metals, lake aluminum concentrations meet the applicable acute criteria. Lake arsenic concentrations meet both acute and chronic criteria. Lake manganese concentrations have met the human health criteria since September 2001. Lake concentrations meet the acute and chronic criteria for zinc. In summary, the lake meets water quality objectives for the subject metals.

Generally, lake studies have noted that constituents of concern such as arsenic, boron, selenium, and aluminum in Castac Lake are derived from the surrounding watershed soils. The lake's natural hydrology is such that it goes through relatively lengthy periods of alternating filling and drying based on drought/deluge cycles. During drought cycles, when the lake does not overflow into Grapevine Creek and the lake level falls, conservative constituents concentrate within the lake due to evaporation/evapotranspiration (PACE 2006, Trihey & Associates, 1997; etc.) During protracted periods of above average rainfall, the lake is refreshed and concentrations are diluted and the lake is flushed as it flows into Grapevine Creek. In such an environment, one would expect the levels of conservative constituents to increase steadily during drought cycles, perhaps even to toxic levels, until the lake is once again diluted and flushed out during a wet cycle. Even so, current information indicates that the lake meets applicable water quality objectives for the subject trace elements.

CBD – GENERAL COMMENT 3: CBD states that given the toxic elements in Castac Lake and the documented flooding events into Grapevine Creek, both issues should be addressed here in the present WDRs, and the public should be permitted to review and comment on the Storm Water Pollution Prevention Plans (SWPPPs).

RESPONSE: Regarding the discharge of “toxic elements” from Castac Lake to Grapevine Creek, see response to CBD – General Comments 1 and 2.

Regarding flooding in Grapevine Creek also see response to CBD – General Comment 2. Additionally, the outflow from Castac Lake to Grapevine Creek is uncontrolled flow through culverts under Lake Drive. The Discharger is proposing modifications to these structures. The water quality impacts related to dredge and fill activities associated with the proposed modifications will not be regulated by the TWDRs, but they will be regulated by the Corps permit action and the Water Quality Certification. Further, the design of the outlet structure will have to comply with the Kern County Engineering, Surveying, and Permit Services Department floodplain management requirements.

Proposed modifications to the roadway embankment, outlet culverts, and lake elevation will moderate the discharge into Grapevine Creek and provide flood protection for the post- PROJECT condition to comply with Kern County standards. Flood routing characteristics of Castac Lake for the existing and proposed developed conditions are presented in the Drainage Report.

As discussed previously, the TWDRs contain discharge specifications to address hydromodification control and include requirements to preserve the long-term pre-PROJECT flow distribution in channels under post-construction conditions, including the waters regulated by the TWDRs. The TWDRs require post-construction monitoring of hydrologic and vegetation conditions in Grapevine Creek and require implementation of corrective actions, if necessary, to address specific problems or conditions of concern.

Regarding public comment on SWPPPs required by the proposed orders, consideration and adoption of the TWDRs is not a National Pollutant Discharge Elimination System action and, therefore, there is no regulatory requirement to provide the public an opportunity to comment on the SWPPPs. Nonetheless, to ensure consistency with the implementation of the State Water Board Construction General Permit, Central Valley Water Board staff will post the SWPPPs on its website for a thirty day public comment period prior to Executive Officer consideration of approval.

CBD – GENERAL COMMENT 4: CBD asserts that as these WDRs are limited to the construction period, the Central Valley Water Board should be required to issue non-construction, ongoing WDRs and SWPPPs to remedy the above issues on a permanent basis, per Criteria No. 13 of the proposed WDRs.

RESPONSE: Consistent with State Water Board’s approach in the Construction General Permit, the TWDRs do not propose to regulate ongoing municipal storm water discharges from the PROJECT after construction. Central Valley Water Board staff will have to consider whether WDRs are needed for ongoing municipal storm water discharges. If determined to be necessary, WDRs for ongoing municipal discharges in the TMV Project area will be drafted and circulated for public comment.

CBD – GENERAL COMMENT 5: CBD asserts that the Tri-County Watchdogs in a 29 June 2009 letter alerted the Central Valley Water Board to ongoing depletion of groundwater and water quality impacts to Castac Lake and Grapevine Creek caused by the TMV development and that Central Valley Board staff, in a 13 July 2009 letter, commented on the poor water quality in the lake. The CBD letter states the proposed WDRs do not address these apparent “violations,” nor do they make an attempt to provide any remedy. Further, that the Central Valley Water Board should address these serious water quality concerns, both in these proposed WDRs and through discrete enforcement actions.

RESPONSE: Regarding perceived water quality impacts to Castac Lake, see responses to CBD – General Comments 1 and 2 above. Also, Central Valley Water Board staff responded to the Tri-County Watchdog letter (attached) in a 27 July 2009 letter (also attached). The staff letter informs the Tri-County Watchdogs that groundwater pumping is largely outside the purview of regional water quality control boards. The letter also notes that increased salinity in upper Grapevine Creek is, in staff’s opinion, expected given the local hydrologic system.

CBD’s assertion that Central Valley Water Board staff commented on the “poor water quality in the lake” is incorrect, or at minimum, takes staff comments out of context. Comments provided by the Central Valley Water Board staff asked for potential groundwater and surface water impacts to be addressed in the Final EIR. TMV addressed groundwater and surface water impacts in the Final EIR. It also provided the Hydromodification Report and the Drainage Report to address these issues.

CBD – SPECIFIC COMMENT - 1: CBD asserts the TWDRs mischaracterize Castac Lake as “alkali lake,” and implicitly a permanent lake, and asserts that Castac Lake is in fact a seasonal water, frequently dry in its history, and has been maintained at its current year-round level since 2001 through extensive groundwater pumping by Tejon Ranch.

RESPONSE: No change has been made to the TWDRs based on the comment. The term alkali lake refers to the salinity of the lake and its soils during low-pool events. It does not imply anything about the permanency of the lake. If anything, CBD’s characterization of the lake as seasonal is misleading. While lake levels do fluctuate based on the season, the frequency of lake full/lake dry spells is governed largely by precipitation patterns extending over periods of three years or more (PACE 2006). The PACE report notes that the lake was full or contained water during the 1940s, was dry in or almost dry in the early 1950s, largely dry in the 1980s, and overflowing into Grapevine Creek in the 1990s. Trihey & Associates indicated that the lake was last dry in 1989, and was largely full from 1994 to 1997, prior to management of the water level by Tejon Ranch.

CBD – SPECIFIC COMMENT - 2: CBD refers to Finding 13, which states the TWDRs do not regulate the proposed PROJECT wastewater treatment facility, water reclamation facility, or ongoing municipal storm water discharges. The comment asks how the TWDRs will protect

Grapevine Creek during construction and post-construction flood events and whether the post-construction WDRs will do the same. The comment also states the public should be given the opportunity to comment on the Discharger's Storm Water Pollution Prevention Plans (SWPPPs) and that there is a typo on page 19 regarding when SWPPPs are due.

RESPONSE: Regarding the protection of Grapevine Creek from flooding, see responses to CBD - General Comments 1, 2, and 3.

Regarding public review of the SWPPPs, see response to CBD – General Comment 3.

The typographical error has been corrected.

CBD – SPECIFIC COMMENT - 3: CBD asserts the TWDRs inappropriately approves the Hydromodification Report without discussing the details of the technical report or providing public access to the report. CBD wants to know what information is approved and how the Board evaluated the information therein.

RESPONSE: The Hydromodification Report was submitted with the Discharger's application in November of 2009 and has since that time been a part of the administrative record which is available for public review. Further, the Hydromodification Report was originally submitted with the Draft Environmental Impact Report as Appendix I1, on 7 July 2008, and approved on 5 October 2009 in the Final EIR. The Final EIR is available to the public on the Kern County Planning Department website.

Finding 28 has been modified to include more technical detail and describe what parts of the Hydromodification Report are approved for the purposes of the TWDRs. Generally, the TWDRs approve the approach of the Hydromodification Report. For example, the TWDRs require the Discharger to implement hydromodification BMPs so that post-Project flows equal pre-Project flows to reduce erosion potential. The TWDRs approve the post construction erosion potential criteria of 1.0 that correlates with no change from existing conditions with a maximum variance of 20% (Discharge Specification C.15). The TWDRs approve the adaptive management and monitoring strategy proposed by the Hydromodification Report in that stream flows and sediment loads, stream conditions, and BMP performance will be monitored to determine mitigation measure effectiveness in meeting the erosion potential criteria. If necessary, BMPs will be modified to ensure that post-PROJECT flows equal pre- PROJECT flows (Monitoring and Reporting Program, Post-Construction Monitoring and Post-Construction Storm Water Annual Report sections). Finally, the TWDRs approve and require the application of the mitigation measures proposed by the Hydromodification Report and incorporated into the Final EIR that are applicable to the project covered by the TWDRs (Discharge Specification C.8).

The report was evaluated using best professional judgment, based on the information provided, with reference to standards and objectives in the Basin Plan and other applicable sources from the USEPA and the State Water Resource Control Board.

CBD - COMMENT - 4: CBD comments again on Castac Lake toxicity and the beneficial use of contact recreation which is assigned to the lake under the Tulare Lake Basin Plan. The comment refers to the acknowledgement by TMV in the CEQA document that contact recreation will not be allowed in the lake by the lake owner Tejon Ranch Company, "...apparently due to unsafe levels of toxic constituents, including arsenic." CBD notes that "CVRWQCB criticized this action ... in its comments on the DEIR." CBD also notes that the lake requires mechanical aeration to avoid deleterious dissolved oxygen levels and speculates that the lake does not meet the narrative water quality standard for toxicity. CBD asks for an explanation of how REC-1 will be protected in Castac Lake, and CBD asks "...whether the developer/applicant can unilaterally declare Castac Lake as exempted from the contact water sport beneficial use without securing an appropriate basin plan amendment."

RESPONSE: The TWDRs do not apply to Castac Lake. See response to CBD - General Comments 1 and 2, above.

That said, contact recreation (REC-1) is a designated beneficial use of Castac Lake, but due to naturally occurring conditions beyond the control of the Discharger may generate concentrations of coliform exceeding applicable water quality objectives for coliform in Castac Lake. Therefore, TMV has included in the Final EIR, at the request of the Kern County, a mitigation measure to prohibit swimming and contact recreation in Castac Lake in order to protect public health against potential pathogen exposure.

The Central Valley Water Board comment on the Final EIR was intended to alert the Discharger of the impropriety of proscribing a designated beneficial use through a CEQA document with a "mitigation measure" and to encourage the Discharger to include mitigation measures to address controllable factors associated with the project that may increase coliform concentrations. Only the State Water Board and regional water quality control boards have the authority to modify the scope and applicability of a designated beneficial use of a State water through the basin plan amendment process. Central Valley Water Board staff believe that other mitigation measures in the Final EIR do address PROJECT related controllable factors for coliform.

The *Water Quality Control Plan for the Tulare Lake Basin, Revised February 2004*, makes it clear that the achievement of water quality objectives relies on the regulation of controllable factors, and even then, water quality objectives may not be achieved. It is also clear that dischargers are not required to improve water quality where it is degraded due to natural causes. Thus, if coliform concentrations in Castac Lake exceed water quality objectives due to natural and uncontrollable causes (wildlife, etc.), then the applicant/developer is not required to make them better.

CBD – SPECIFIC COMMENT - 5: CBD again comments on flooding potential from flows from Castac Lake into Grapevine Creek.

RESPONSE: See responses to CBD - General Comments 1 and 2.

TMV COMMENTS

TMV - COMMENT - 1: TMV requests that Finding 2 be modified to clarify that the PROJECT does not intend to use groundwater for potable or non-potable uses.

RESPONSE: The requested change has not been made. The water supply source for the PROJECT is not relevant to the proposed TWDRs.

TMV - COMMENT - 2: TMV requests that Finding 7 be modified to note the applicant has amended the Clean Water Act Section 404 federal permit application to avoid all federal jurisdictional wetlands on the site.

RESPONSE: The finding has been modified.

TMV - COMMENT - 3: TMV requests an additional finding be included describing the mitigation measures for discharges to the Castac Lake Watershed.

RESPONSE: While the TWDRs do not apply to discharges into Castac Lake Watershed, new Finding 8 regarding mitigation measures applicable to waters upstream of those regulated by the TWDRs has been added clarify the application PROJECT mitigation measures.

TMV - COMMENT - 4: TMV requests clarification as to whether the Numeric Action Limitation Provisions B.1-B.3, Discharge Specifications Provisions C.1-C.23, and Attachment D, Good Housekeeping Measures, apply to construction activities only.

RESPONSE: The Numeric Action Limitation Provisions apply to any storm water or authorized non-storm water discharge from a project construction site. Discharge Specifications Provisions, and Attachment D, Good Housekeeping Measures apply to all project construction activities, including all dredge and fill activities.

The TWDRS have been modified to clarify the provisions.

TMV - COMMENT - 5: TMV asserts the Reporting section of the Monitoring and Reporting Program (MRP) is not entirely clear or practical. Specifically, the post- construction reporting requirements in section III.C.2 appear to last in perpetuity.

RESPONSE: The reporting requirement has been modified to require post-construction annual reporting for five years following completion of construction.

TMV – COMMENT - 6: TMV noted a discrepancy in the MRP regarding whether records should be kept for 3 or 5 years.

RESPONSE: The TWDRs have been corrected to require record retention for 5 years.