

STAFF REPORT

DATE: July 08, 2008

TO: Bruce Wolfe, Executive Officer

FROM: Carmen Fewless, Environmental Scientist
North Bay Watershed Division

SUBJECT: **Staff Report for Resolution Adopting Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed (Tomales Bay, Lagunitas Creek, Walker Creek and Olema Creek) in the San Francisco Bay Region**

Introduction

This Staff Report presents supporting information for the Tentative Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed (Tomales Bay, Lagunitas Creek, Walker Creek, and Olema Creek) (waiver of WDRs) that will be considered by the Water Board on July 08, 2008.

The Water Board is charged by the California Water Code (CWC) with protecting the quality of ground and surface waters of the State within the Region. One of the methods by which the quality of surface and ground waters of the State within the Region are protected is by the issuance of Waste Discharge Requirements (WDRs). Section 13263 (a) of the CWC requires the Water Board to prescribe WDRs for any existing or proposed waste discharge within its jurisdiction. WDRs implement relevant water quality control plans to protect the uses of receiving waters, and consider, among other things, the beneficial uses of receiving waters, the appropriate water quality objectives that protect those uses, consideration of other waste discharges, and nuisance prevention. WDRs can be issued to a specific person or entities or for categories of discharge that satisfy certain criteria as discussed in Section 13263(i) of the CWC.

Section 13269 of the CWC gives the Water Board the authority to waive the requirement that dischargers obtain WDRs for specific discharges and specific types of discharges, if waiving such requirements is not against the public interest and certain conditions are satisfied. Waivers can also relieve dischargers of the requirements to submit a Report of Waste Discharge (ROWD). Waivers are at the discretion of the Water Board, which also has the authority to terminate waivers at any time. The existence of a categorical waiver does not excuse a discharger from any other legal requirements nor does it permit the violation of water quality objectives or the impairment of beneficial uses.

The Water Board is pursuing the use of a waiver of WDRs for grazing operations, as it reflects Board staff's expectation of compliance by the majority of the dischargers, it is protective of beneficial uses, and it is the most efficient permitting route given limited staff resources. The Water Board would still retain the right to issue individual WDRs on an as-determined basis.

The proposed waiver of WDRs implements the Tomales Bay Pathogen Total Maximum Daily Load (TMDL), the Walker Creek Mercury TMDL, and California's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Enforcement Policy). It is also intended to help address the requirements of future sediment and nutrients TMDLs in the Tomales Bay Watershed, as it requires that landowners/operators of grazing operations in the watershed implement multi-objective management practices.

The Tomales Bay Pathogen TMDL defines 'grazing lands' as all lands grazed by livestock, including ranchlands, riparian areas, and pasturelands. For the purposes of this waiver of WDRs, the term 'grazing operation' will refer to those facilities where animals are fed or maintained on irrigated vegetation or rangeland forage for a total of 45 days or more in any 12-month period, and vegetation forage growth is sustained over the lot or facility during the normal growing season. The grazing operation includes auxiliary facilities such as roads, reservoirs, etc. This definition was recommended by staff at the University of California Cooperative Extension.

Background

Tomales Bay is located in western Marin County, approximately 31 miles northwest of San Francisco. Tomales Bay has a surface area of approximately 11 square miles. The mouth of Tomales Bay is at the southern end of Bodega Bay, and the water body extends in a southeasterly direction along the line of the San Andreas Fault. Tomales Bay is approximately 12 miles in length with an average width of less than one mile, and is characterized by relatively shallow water, with average depth being less than 20 feet. The Tomales Bay Watershed climate is consistent with the Mediterranean climate of the central coast of California, receiving intense rain during the winter months. Average annual rainfall ranges from 26 inches per year in the northern and eastern part of the watershed to 39 inches per year in the south (Tomales Bay Shellfish Technical Advisory Committee (TBSTAC) 2000).

The watershed area for Tomales Bay is approximately 216 square miles with four major drainage areas: (1) Direct drainage from small tributaries along the west and east shores (28 square miles); (2) Lagunitas Creek (93 square miles) to the southeast; (3) Olema Creek (19 square miles), which flows into Lagunitas Creek close to the head of the Bay; and (4) Walker Creek (76 square miles) to the northeast. (Figure 1) (TBSTAC, 2000).

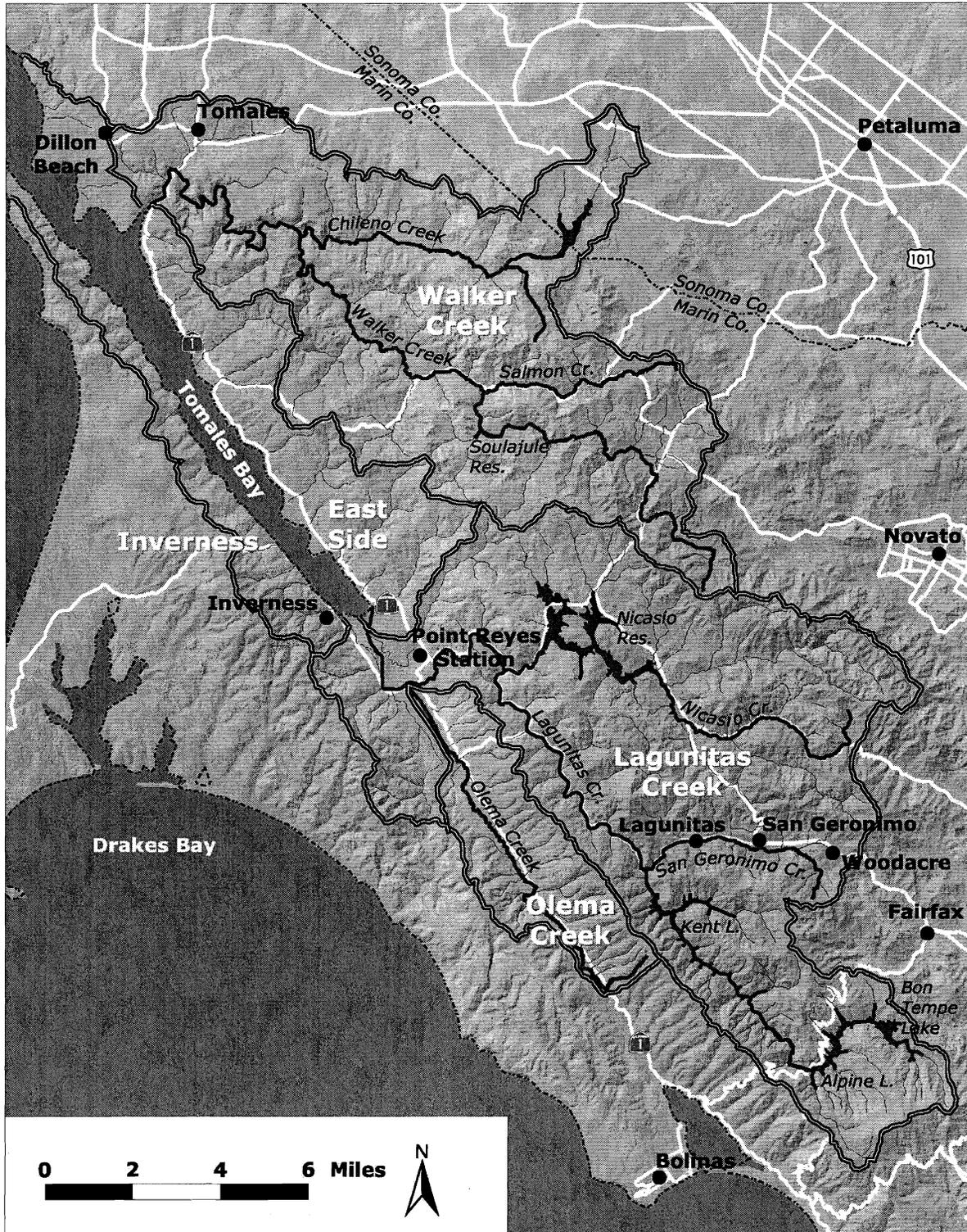
The U.S. Geological Survey maintains stream gauges on both Walker and Lagunitas creeks. These gauges measure only a portion of the runoff from their respective watersheds, as well as any water released from catchment reservoirs. It has been estimated that about two-thirds of the runoff into Tomales Bay comes through the Lagunitas-Olema Creek drainage even though this area makes up about 35% of the Watershed (TBSTAC, 2000). The Walker Creek drainage, which includes Chileno, Arroyo Sausal, Salmon and Keyes creeks, makes up about 35% of the Tomales Bay Watershed area, but produces about 25% of the annual runoff into the Bay (TBSTAC, 2000). The remainder of the flows into Tomales Bay (approximately 10%) comes from small tributaries that drain directly to the bay, which make up 23% of the total Watershed area.

Among other uses, the Tomales Bay Watershed is used for recreational hiking, boating, camping, picnicking, clamming, fishing, and bird watching. The Bay also supports the commercial cultivation and harvesting of shellfish, including oysters, mussels and clams. Herring and halibut are also harvested commercially from wild populations, and there is a sport fishery for halibut in the Bay.

There are nine small towns with the Watershed, with limited commercial development and no industry. According to the 2000 census, the west side of Tomales Bay has a population of 1,421, with a total of 707 households. The east side of the Bay (Dillon Beach, Tomales, Point Reyes Station, Lagunitas-Forest Knolls, San Geronimo, and Woodacre) has a population of 5,011, with 2,047 households. All of the towns are served by onsite sewage disposal systems except the town of Tomales, which is served by a centralized wastewater treatment facility.

Figure 1

Tomales Bay Watershed

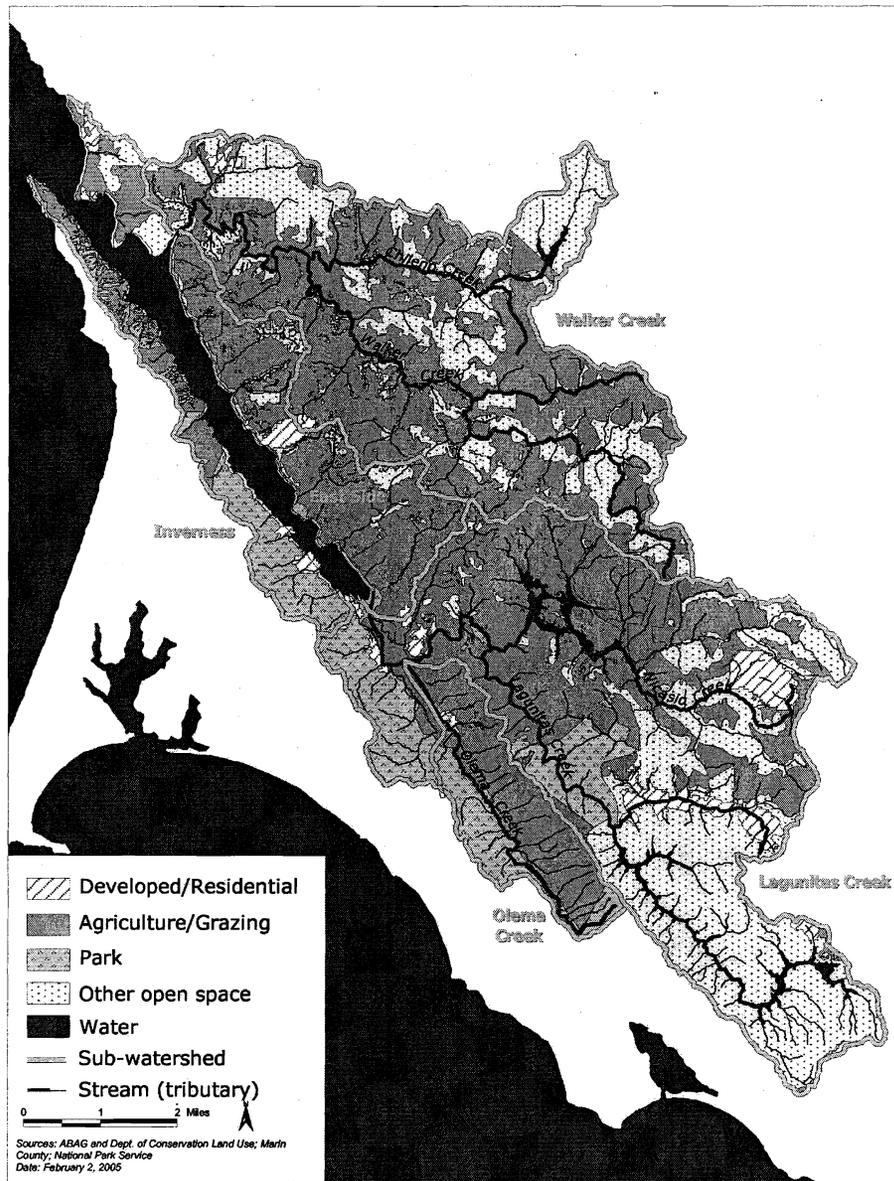


The major land uses in the Watershed are livestock grazing, dairy farming, equestrian, low-density residential, and parklands. Beef, sheep and dairy farms have been an important part of the local economy since the mid-1800s, although the number of dairies has been declining. However, since some dairies have switched to raising beef cattle and others have increased the size of their dairy herds, the total number and type of animals in the Watershed is not known.

Cattle grazing and dairy land uses are mainly located on the east and southern portions of the watershed and adjacent or very near the Bay and many of its tributaries, accounting for almost 55% of the land uses by acreage (Figure 2)

Figure 2

Land Use in the Tomales Bay Watershed



If improperly managed, grazing operations can pose a threat to both surface and ground water quality, irrespective of herd size. Animal waste discharges, including contaminated storm water, may contribute pathogens, ammonia, salts, and excess sediment to nearby streams. The deleterious properties of animal

wastes to aquatic organisms have been well documented, contributing to decreased in-stream dissolved oxygen levels, and causing acute and chronic toxicity due to un-ionized ammonia levels. Furthermore, where grazing operations in the Tomales Bay area are located both very close to streams and/or on hillsides reinforces the necessity for diligent management practices.

Tomales Bay and its tributaries have been identified as impaired for nutrients, sediment, and pathogens; additionally, it is identified as impaired for mercury in the Walker Creek watershed. The Tomales Bay watershed has been placed on the Clean Water Act 303(d) list. A TMDL for pathogens was adopted by the Water Board on September 21, 2005, and subsequently approved by U.S. EPA on January 10, 2007. The basis for the pathogen TMDL includes exceedances of the numeric standard for shellfish harvesting and for recreational uses. The pathogen TMDL includes an associated Tomales Bay Watershed Pathogen TMDL Implementation Plan (TMDL Implementation Plan) that specifies the actions necessary to protect and restore beneficial uses.

Grazing lands in the Tomales Bay Watershed are identified in the pathogen TMDL as one category of pollutant sources. The TMDL Implementation Plan specifies required implementation measures for each of the source categories. The required implementation measures for grazing operations include evaluation of operating practices; development of comprehensive site-specific pathogen control measures; an implementation schedule for such management measures; and, submittal of progress reports documenting actions undertaken.

To comply with the TMDL Implementation Plan, grazing lands' landowners and lessees must submit to the Water Board a ROWD or other submittal in lieu of a ROWD. Grazing lands' landowners and lessees must also comply with all applicable WDRs or waiver of WDRs, and report progress on implementation of grazing management measures that reduce or eliminate animal waste runoff. These reports must be submitted individually or jointly or through a third party.

On January 28, 2007, the Water Board approved the Walker Creek Mercury TMDL. The Walker Creek Mercury TMDL identifies sources of mercury that remain in creek beds, banks and floodplains downstream of the Gambonini mine, and specifies that applicants seeking coverage under WDRs or Waiver of WDRs to control pathogens, nutrients or sediments in the Walker Creek watershed must also incorporate Best Management Practices (BMPs) to limit unnecessary increases in total, methyl or particulate mercury production or discharges. Implementation actions required for the depositional areas downstream of the Gambonini mine are site-specific management measures to prevent, to the maximum extent practicable, erosion or resuspension of mercury-laden sediment from downstream depositional areas.

Stakeholder Outreach and Establishment of Technical Advisory Group

Throughout the last three years, Water Board staff has made a concerted effort to increase our communication and general availability to the grazing-related industry. In November and December of 2005, Board staff held meetings with a small group of stakeholders to introduce the need for the regulation of grazing operations in order to implement the Tomales Bay Pathogen TMDL and the NPS Enforcement Policy. In January 2006, Board staff introduced draft permit language to a group of approximately 40 stakeholders representing landowners, operators, industry groups, farming associations, and various agencies. The draft permit language was not well received by the stakeholders; some believed a permit was not needed, and the general perception was that Board staff had unilaterally worked on the permit language without input from those affected by the permit. After a few months' hiatus, Board staff reinitiated the permit process and held a public meeting in August 2007 at Point Reyes Station, which was attended by about 70 stakeholders. At this meeting, Board staff reintroduced the need for regulation, making it clear that the Water Board had the obligation to regulate grazing operations in order to implement the Tomales Bay Pathogen TMDL and the NPS Enforcement Policy. Subsequently, Board

staff convened and met several times with a technical advisory group comprised of representatives from the University of California Cooperative Extension, the Natural Resources Conservation Service, the Marin County Resource Conservation District, and the Western United Dairymen, to ensure that proposed waiver conditions were reasonable, feasible, and protective of water quality. A copy of the draft waiver language was reviewed by the technical advisory committee, and their comments were taken in consideration when the proposed tentative waiver was finalized. On June 11, 2008, Board staff held another public workshop at Point Reyes Station, where the tentative waiver language and the appropriate means to comply with the proposed waiver were discussed, and formal public comments were taken.

California Environmental Quality Act

The Water Board is the lead agency for this project under the California Environmental Quality Act (Public Resources Code Section 2100 et seq.) (CEQA). The Water Board will consider a negative declaration for adoption pursuant to CEQA.

New Regulatory Program for Grazing Operations in the Tomales Bay Watershed

The proposed Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed contains conditions that include basic visual monitoring and compliance monitoring reporting. It contains the requirement to submit an annual certification of compliance. Additionally, landowners/operators of the ranch facility are required to develop and implement a Ranch Water Quality Plan that includes an assessment of facility conditions, an inventory of resources and management practices, and a schedule for implementation of new management practices that reduce nonpoint source pollution due to grazing.

The proposed Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed is limited to those grazing operations expanding 50 acres or more. Based on Marin County Parcel Records, ranches that span 50 acres or more make up approximately 90 percent of the agricultural lands in the area. Those grazing operations that are smaller than 50 acres are still expected to effectively manage their facilities, and may be required to obtain Waste Discharge Requirements on a case-by-case basis, if the potential for water quality impacts are found.

Board staff foresee initially focusing its resources on bringing most grazing operations under the waiver. Inspection of facilities is expected at the beginning of the program; however, we anticipate needing less frequent inspection and oversight of the landowner/operators who file for coverage under the waiver, allowing staff to focus our inspection and oversight efforts on the few remaining non-complying facilities and highly impacted areas. Board staff will still periodically inspect facilities regulated under the waiver; review submitted annual certifications; and revise, as necessary, the list of complying facilities.

Third Party Program

The NPS Enforcement Policy encourages the Water Boards to "be as creative and efficient as possible in devising approaches to prevent or control nonpoint source pollution." This includes development of third-party programs, including coalitions of dischargers in cooperation with a third party representative, organization, or government agency to assist the dischargers in complying with the requirements and assure the Water Board and the public that actions have been taken to reduce nonpoint source pollution. The third party role is restricted to entities that are not actual dischargers under the State Water Board/Regional Water Board permitting and enforcement jurisdiction. Although Board staff has discussed the possibility of a third party program with the Technical Advisory Group and at the public workshops, no potential third party group has come forward. Staff remain open, and encourage the formation of a third party program for this waiver.

Comments Received

Comments on the Tentative Conditional Waiver of WDRs were provided in person at a public meeting held at Point Reyes Station, via e-mail, fax, and traditional mail. We received written comments from ten different parties. The main issues raised in the public comments related to clarification of requirements listed on the attachment forms and proposed submittal deadlines, and requests for extension of the Ranch Water Quality Plan development deadline. Board staff has updated the language of the Waiver and the attachment forms in response to these comments.

The Tomales Bay Pathogen TMDL Implementation Plan requires that a Ranch Water Quality Plan be in place by January 2009. In response to stakeholder request and to allow for updates and modifications to these plans, Board staff postponed the deadline to November 15, 2009, when the first annual compliance report is due. This ten-month extension would provide landowner/operators sixteen months, a reasonable amount of time, from the time the Waiver is adopted until the plan is to be in place. Water Board staff feel strongly that delaying the submittal of the Ranch Water Quality Plan, therefore delaying implementation of management practices that address pollution problems, is unjustifiable given the fact that Tomales Bay and its tributaries are impacted and that the requirement for a Ranch Water Quality Plan was initially adopted by the Water Board in September 2005. In addition, Ranch Water Quality Plans can continue to be updated after November 15, 2009, in response to changing conditions and lessons learned during plan implementation.

Recommendation

In accordance with the above, in order to implement the Tomales Bay Pathogen TMDL, the Walker Creek Mercury TMDL and the NPS Enforcement Policy, I recommend that the Board adopt the Resolution conditionally waiving WDRs for Grazing Operations in the Tomales Bay Watershed.

Concur:


Susan Gladstone, Section Leader
North Bay Watershed Division


Wil Bruhns, Chief
Planning and TMDL Division

References:

TBSTAC, 2000 Tomales Bay Shellfish Technical Advisory Committee. 2000. *Investigation of Nonpoint Pollution Sources Impacting Shellfish Growing Areas in Tomales Bay, 1995-96*. Prepared by the State Water Resources Control Board, California Department of Health Services, and the California Regional Water Quality Control Board, San Francisco Bay Region. Final Report.