APPENDIX C

RESPONSE TO COMMENTS

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

RESPONSE TO WRITTEN COMMENTS FOR ITEM 7

on
Renewal of Conditional 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

Our responses to comments (RTC) on the tentative order (TO or Grazing Waiver) are provided below. This RTC document consists of two parts: 1) responses to key comments, and 2) responses to individual comments.

Key comments are those comments that share recurring themes or voice similar concerns. Individual comments are summarized and sometimes quoted from the comment letter for greater clarity and brevity. Every effort was made to preserve the original meaning and context. Where comments are repeated, we refer back to the earlier responses.

The TO was circulated for a 30-day public review on September 16, 2013. By the close of the comment period on October 16, we had received comments from the following nine parties:

No.	Date Received	Commenter Name	Affiliation
1.	September 13, 2013	Vanessa Zubkousky-White	California Department of Public Health
2.	September 18, 2013	Mervyn Zimmerman	Private Citizen
3.	September 25, 2013	Neysa King	Tomales Bay Watershed Council
4.	September 30, 2013	Amy Trainer	Environmental Action Committee of West Marin
5.	September 13, 27, 28; October 2, 8, 2013	Gordon Bennett	Save our Seashore
6.	October 16, 2013	Nancy Scolari	Marin Resource Conservation District
7.	October 16, 2013	Justin Oldfield	California Cattlemen's Association

No.	Date Received	Commenter Name	Affiliation
8.	October 16, 2013	a. Chris Scheuring b. Michael Marsh c. Dominic Grossi d. Unknown Author	California Farm Bureau Federation Western United Dairymen Letter (4/12/2004) Marin County Farm Bureau Letter (6/18/2008) Farm Bureau Letter (8/2008)
9.	October 16, 2013	David Lewis	University of California Cooperative Extension

Letter No. 8 includes comments on the TO and also provides three attachments that pre-date it. These include a 2004 comment letter submitted to the Board when it was considering adoption of the Tomales Bay Pathogens Total Maximum Daily Load (TMDL) in the 2004-2005 timeframe, a 2008 letter submitted to the Board when it was considering adoption of the 2008 Tomales Bay Grazing Waiver, and a third letter, dated August 2008, submitted after adoption of the 2008 Grazing Waiver.

Appendix B contains copies of all comments received.

KEY COMMENTS

Key Comment No. 1

Several commenters raised concerns about the addition of a new requirement to assess Residual Dry Matter (RDM). Concerns expressed include 1) the need to provide adequate training to agricultural support agencies, Water Board staff, organizations and ranchers, 2) using RDM alone as a regulatory tool may be problematic, in that there are other site conditions that can impact RDM, and 3) RDM was not developed as a standalone monitoring tool to assess water quality impairment.

In addition, a concern was expressed about interpreting RDM thresholds, specifically, that Rangelands that fall below minimal RDM levels should not be presumed to be poorly managed. The comments included a request to to modify the language in Section 6f of the TO.

Response to Key Comment No. 1

Residual Dry Matter assessment is an integral component of the Ranch Water Quality Plan[1] designed to protect water quality, enhance rangeland ecological health, and maintain forage productivity. It is also a requirement of the Napa River/Sonoma Creek Grazing Waiver Program adopted by the Board in 2011.

RDM is a measure of herbage material or vegetative stubble (mulch) left on the ground after a growing season. For California rangelands, RDM is usually measured before the first fall rains,

[1] See Regional Water Board Webpage - http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/tomalespathogens/RanchWQPlan2013.pdf

in late September/October. RDM is recognized by rangeland managers as an important indicator of grazing pasture health and is used to assess grazing objectives and adjust management practices when needed. The amount of RDM on the ground has a direct influence on such environmental factors as soil surface erosion, soil stability and structure, water infiltration, nutrient cycling, plant species composition, habitat, forage, and seedling germination.[2]

The Grazing Waiver's Compliance Monitoring form and the Annual Certification require the comparison of field-based measured values against the minimum RDM for the specific range land assessed. Although the TO does not specify the field method to be used in measuring RDM, it describes one possible recommended assessment approach based on University of California Cooperative Extension publication 8092, setting minimum allowable RDM based on grassland type, slope and woody cover[3]. The Compliance Monitoring form, found on page 19 in the Ranch Water Quality Plan, requires Dischargers to report which industry-recognized RDM assessment method they, or their assigned representatives, employ.

With respect to training, Board staff agrees that proper training is required to assess RDM and will therefore partner with local organizations, including the UC Cooperative Extension, Marin RCD, and others to make sure that Landowners/Operators have the necessary training to assess and report RDM, as required, in a cost effective manner. Additionally, Board staff will be appropriately trained in RDM assessment and interpretation.

Used alone, minimum RDM values do not necessarily equate to poor grazing management practices. A variety of non-controllable environmental factors (fire, drought, rocky soil types, etc.) influence RDM. We recognize that low RDM, below minimum values, may be due to a planned pasture management strategy, such as the control of invasive species or noxious weeds, or may be associated with an animal service area located on a pasture that is not representative of the grazing operation as a whole.

The RDM minimum is not a regulatory standard; it is a threshold to compare against field measured values to assess the need for management actions. Assessments measured below this threshold are expected to prompt the Landowner/Operator to determine if the implementation of additional management practices is warranted to conserve soils from erosion. Board staff will not use reported RDM as the only regulatory tool or as a stand-alone compliance threshold. It is, however, a useful tool to help inform assessment of grazing operations. Language in the TO was modified to clarify that the RDM is not a target; the last sentence in Section 6.f. now reads: *"If minimum RDM levels are not met, the Discharger shall provide an explanation in the Annual Certification of Compliance document."*

Key Comment No. 2

Commenters raised concerns that, from their perspective, the California Water Code does not authorize Water Board staff to assume that all ranchers in the Tomales Bay watershed meeting the conditions of the Grazing Waiver discharge wastes. Only those ranchers discharging or

[2] Monitoring Annual Grassland Residual Dry Matter. Wildland Solutions Field Solutions Guide Series. Keith Guenther and Grey Hayes.

[3] See UC Davis Webpage - http://californiarangeland.ucdavis.edu/Publications%20pdf/8092.pdf

proposing to discharge waste that could affect the quality of the waters of the State should be required to seek coverage under the Waiver.

Response to Key Comment No. 2
The TMDL identified grazing operations as a potential source of pathogens and a threat to water quality and required all actively grazed parcels in the watershed to comply with waste discharge requirements or waivers of waste discharge requirements. Based on the Tomales Bay Pathogens TMDL, there is a presumption that all grazing operations potentially discharge to waters of the State. The TO implements the TMDL and defines eligible Landowners and Operators conducting Grazing Operations on Grazing Lands greater than 50 acres in the Tomales Bay watershed as Dischargers that are either discharging, or proposing to discharge, waste that could affect the quality of waters of the State.

Since the adoption of the 2008 Grazing Waiver, we have received and processed notices of non-applicability (NNAs) for those properties excluded from the Grazing Waiver based on the following reasons: located outside of the watershed, agricultural activities incompatible with the Grazing Waiver (horse ranches, orchards, dairies) and open space/water districts. These properties are excluded from the Grazing Waiver Program but may need to enroll in the future or obtain waste discharge requirements if conditions or operations change.

Should the Landowner/Operator of an eligible Grazing Operation be able to show/demonstrate that his/her Grazing Operation does not discharge to the waters of the State or impact water quality, they too can submit an NNA to the Water Board for consideration.

Key Comment No. 3
Commenter raised concerns similar to those that were raised at the time the TMDL was adopted about attainability of the TMDL due to wildlife being a source of pathogens in the watershed. They raised concerns that TMDL load allocations do not account for what is attainable in the watershed based on pathogen background levels from resident wildlife. Furthermore, the pathogen TMDL and allocations are not attainable 365-days per year or during storm events.

Response to Key Comment No. 3
Wildlife
We are required by the Water Code[4] to address all controllable sources of bacteria in the watershed, and the 2005 Tomales Bay Pathogens TMDL load allocations were developed to meet applicable water quality objectives. The TMDL considered and acknowledged that resident wildlife (uncontrollable sources) generate a natural background pathogen signal. The Grazing Waiver does not require control of sources of pathogens from resident wildlife.

Concerns regarding standards attainability due to wildlife were raised when the TMDL was adopted in 2005. At that time, the TMDL was modified in response to these concerns to clarify:

[4] See State Water Board Webpage - http://www.swrcb.ca.gov/laws_regulations/docs/portercologne.pdf

1. Discharging entities would not be held responsible for uncontrollable coliform discharges originating from wildlife.
2. The TMDL numeric targets and load allocations are not directly enforceable. For purposes of demonstrating attainment of applicable allocations, responsible parties will only be responsible for compliance with specified implementation measures and applicable waste discharge requirements or waiver conditions.
3. If pathogen source control actions are fully implemented throughout the watershed and the TMDL targets are not met, the Water Board may consider re-evaluating or revising the TMDL and allocations.
4. If wildlife contributions are determined to be the cause of exceedances, the TMDL targets and allocation scheme would be revisited as part of the adaptive implementation program.

Concerns regarding standards attainability still remain. Landowners/Operators are concerned that, despite their best efforts to undertake appropriate management measures, the TMDL's targets and allocations will not be achieved. We acknowledge these concerns yet we believe that, while progress has been made towards implementing the TMDL, not all pathogen source control implementation actions have been scoped out and completed within the watershed. The TMDL identified a mosaic of controllable sources of pathogens beyond resident wildlife and grazing lands. These included onsite septic systems, small wastewater treatment facilities, illicit boat discharges, equestrian facilities, dairies, and municipal stormwater runoff. Although progress has been made on all fronts, until significant and lasting progress is made towards controlling all source categories, it would be pre-mature to determine that the TMDL cannot be attained.

Storm Events

Due to the diffuse nature of the watershed's pathogen sources (non-point source runoff) and variability in pathogen loads as they relate to storm events, some uncertainty is expected. The TMDL found that during non-storm periods, Tomales Bay coliform levels are typically below the water quality objectives for shellfish harvesting waters, indicating that in-Bay wildlife, such as seals and birds, are not significant sources. It is further acknowledged that the largest discharges of fecal coliform, and the great majority of the exceedances of the pathogen-indicator objectives in the Bay, are associated with rainfall, particularly during the winter season. The Walker Creek watershed, which is dominated by grazing lands, produces coliform loads that are extremely high during storm periods and a significant coliform source to Tomales Bay. Fecal coliform and associated pathogen discharges in winter season stormwater runoff are believed to originate mainly from animal agricultural land uses. The TMDL recognized that control of wintertime fecal coliform and pathogen concentrations is expected to be challenging.

As noted above, although progress has been made towards implementing the TMDL, not all pathogen sources have been adequately assessed and controlled. We expect to see improved water quality conditions as implementation of the TMDL progresses. Board staff will continue to support water quality sampling of the watershed, during both the wet and dry seasons, to guide our inspection strategy, identify sub-watersheds for more targeted efforts, and evaluate pathogen concentrations delivered to the watershed.

Key Comment No. 4
Comments received on the Tentative Order reflect a variety of perspectives on the level of water quality improvement that has occurred since adoption of the Tomales Bay Pathogens TMDL in 2005. Some comments are rooted in how we reported water quality trends in the watershed since TMDL adoption and the limitations of the data used to reach our conclusion. This comment is touched on here but is expanded upon in Key Comment No. 5, below.

Some commenters expressed concern that if there has been any "limited improvement" in water quality it has not translated into watershed-scale improvements or reductions in sediment, nutrient or pathogen loading. Some sites which drain predominantly agricultural lands impact the receiving waters of Tomales Bay through elevated levels of sediment, pathogens, and nutrients and there needs to be continued implementation of management practices on agricultural lands in the watershed over the long term to realize water quality improvements.

Others noted that now is the time to comprehensively review the TMDL and the evaluation should include newer sources of information (post 2005 TMDL adoption) that can be combined with ongoing, and earlier water quality monitoring and study efforts to evaluate how conservation and management measure actions have or have not had an impact on watershed conditions and its implications for TMDL load allocation as called for in the adaptive management section of the 2005 Pathogen TMDL.

Other commenters noted that the TO fails to adequately acknowledge the investments and progress made to date by ranchers, east shore homeowners, and others to improve site conditions to benefit water quality. Some stated that the water quality data provides grounds to relax some of the more onerous requirements in the 2013 TO.

Response to Key Comment No. 4
We agree that progress has been made towards implementing the Tomales Bay Pathogens TMDL. However, watershed-scale reductions in pathogen loading are difficult to quantify. We believe, therefore, that continued implementation of management practices is necessary. We note that continued implementation of the Grazing Waiver represents only one piece of the puzzle towards reducing pathogen, sediment, and nutrient loading to the Bay. Similar progress needs to be made across all non-point sources of pollutants across the watershed.

We agree that additional monitoring is needed to assess water quality trends, such as the wet weather SHELL beneficial use, and that additional water quality improvement is needed to achieve TMDL REC-1 water quality objectives in the tributaries.

Water Board-collected water quality data shows that fecal coliform concentrations are consistently meeting water quality objectives for shellfish consumption (SHELL – beneficial use) during dry weather periods in Tomales Bay. Water quality data for the recreational use (REC-1 – beneficial use) shows limited improvement but exceedances are still very common at most monitoring stations.

Comprehensive review

A comprehensive review of the Tomales Bay Pathogens TMDL was anticipated at the time the TMDL and Basin Plan amendment were adopted in 2005. It was acknowledged that the Water Board would welcome new information that would further the state of knowledge about pathogen sources and their relative contributions and that commitment remains.
Board staff welcomes studies designed to assess if the Bay and its tributaries are progressing towards TMDL targets as expected, provided this work is coordinated with the Water Board and provides the opportunity for stakeholder participation. Such studies could evaluate if monitoring efforts need to be modified to detect trends, if implementation actions or allocations need to be modified, if conservation and management measures have or have not had an impact on water quality, and how pathogen loads for the various source categories (including wildlife contributions from open space lands) might affect the targets set by the TMDL. In addition, studies could refine general understanding of the relationship between precipitation, runoff, tributary loads, and shellfish harvest closures, among others. Although we support studies designed to assess water quality progress, a comprehensive review of the TMDL to revise allocations or targets and/or beneficial use attainability is premature until the TMDL is fully implemented, and all controllable pathogen sources have been addressed.

We understand the expressed concerns that the TO may not fully acknowledge the progress made to date by watershed stewards in implementing management practices to improve water quality and habitat. We have revised the TO to acknowledge such efforts.

Key Comment No. 5

Concerns were raised as to the representativeness of the data used to reach the conclusion that there has been "limited" improvement in the watershed.

Comments noted that our analysis of water quality data collected in the watershed was overly simplistic, and the resultant conclusions reached from its analysis out of context in light of sub-watershed conditions. It was further commented that Staff must improve their analysis of the water quality data to account for the size of the sub-watershed sampled, seasonal variability in precipitation, and the amount of rainfall prior to sampling events, and that these data must be made available to the public so that they may do independent analyses.

Some noted that these water quality data need to be integrated into a comprehensive review of the TMDL, while others expressed concern that the conclusions reached from the data that support the finding of "limited" improvement failed to acknowledge the management efforts to date. These comments are addressed in Key Comment No. 4, above.

Response to Key Comment 5

For background, at the October 3 public workshop held at the Marconi Center, Board staff presented a one-page Total Maximum Daily Load Progress Report (Attachment B-1), sometimes referred to by commenters as a "report card," that summarized the basis of the Tomales Bay Pathogens TMDL and described progress made to date to implement the TMDL. The TMDL progress reports are standardized and are required by the State Water Board. They are used to educate the public on the TMDL program and progress that has been made to improve water

quality. Staff used the progress report to support the TO's finding that there has been "limited" improvement in water quality in the watershed.

Staff acknowledges that the data collected in the watershed (and analyzed and used for the progress report) neither considered sub-watershed size nor integrated precipitation. Our evaluation of the data provides a gross, watershed-wide perspective. From that perspective we conclude that there has been limited water quality improvement.

Staff plans to continue to conduct water quality sampling in the watershed and hope, through familiarity gained during field inspections of Grazing Operations, to better understand the context of the sub-watershed these data best represent. Board staff are evaluating how best to integrate this information with geographical data to create a more complete picture of the spatial pathogenic distribution. Staff will work with stakeholders who have local experience in the watershed to help inform our understanding of the system.

As noted in Key Comment No. 4, the Water Board welcomes new information that would further the state of knowledge about watershed pathogen sources, and their relative contributions, and help inform facility inspections. Staff agrees to work with stakeholders to compile water quality data and evaluate current conditions in the watershed. Stakeholders have expressed an interest in a collaborative data evaluation effort and are eager to lend their local observations, knowledge, and experience.

In the past, Board staff has provided its water quality data to anyone that has requested the data. Staff will work to transfer the existing and future water quality data into the California Environmental Data Exchange Network (CEDEN). CEDEN aggregates this data and makes it available to environmental managers and the public. In addition, staff plans to evaluate the feasibility of uploading water quality data collected from watershed partners (assuming that the data meets quality assurance and comparability standards) to CEDEN so that all available data is accessible for evaluation and assessment.

INDIVIDUAL COMMENTS

Comment Email 1: Ms. Vanessa Zubkousky-White, Environmental Scientist.
Affiliation: California Department of Public Health, Pre-harvest Shellfish Unit

Comment No. 1.1
"The map in the draft waiver does not show any ranch parcels >=50 acres in the Sonoma county portion of the Tomales Bay watershed. Can you tell me why that is? I wanted to check that the waiver applies to the entire watershed."

Response to Comment No. 1.1
The TO applies to the entire Tomales Bay watershed. The map of the Tomales Bay Watershed (Attachment A) in the TO indicates that the watershed boundary for the Grazing Waiver includes a portion of Sonoma County.

We neglected to include the Sonoma County parcels when we added parcel boundaries to Attachment A. In light of this comment, we have revised the map appropriately. We appreciate the commenter pointing this out.

Comment No. 1.2
"I understand that there is a poultry/duck farm adjacent to the headwaters of Chileno creek off of Middle 2 Rock Road. Do you know if there are any water quality concerns about this facility? Or do you know who I could contact regarding their waste treatment?"

Response to Comment No. 1.2
In response to the comment provided we were able to locate a poultry/duck operation in the vicinity of Chileno Creek: the Reichardt Duck Farm located at 3770 Middle Two Rock Road in Petaluma. This facility is covered under our Industrial Stormwater permit. We have inspected this facility in the past and are not aware of any water quality concerns.

Comment Phone Call No. 2
Commenter: Mr. Mervyn Zimmerman
Affiliation: Private Citizen

Comment No. 2.1 *Water Board staff received a comment via voicemail from Mr. Zimmerman, who is concerned with bird populations overwhelming natural habitat on Hog Island located in Tomales Bay. According to Mr. Zimmerman, the birds are causing damage to the vegetation which was not observed "10-15 years ago."*

Response to Comment No. 2.1
Board staff contacted the Point Reyes National Seashore to inform them of Mr. Zimmerman's expressed concerns. A wildlife biologist is looking into this issue.

Hog Island is located in the Outer Bay, where the fecal coliform geometric mean was below the SHELL water quality objective in 2012.[5]

Comment Letter No. 3
Commenter: Ms. Neysa King, Coordinator
Affiliation: Tomales Bay Watershed Council

Comment No. 3.1
The Commenter stated that "the evidence from long-term, watershed-scale water quality monitoring conducted or compiled by the Tomales Bay Watershed Council suggests that if there has been any "limited improvement" in water quality it has not translated into watershed-scale improvements or reductions in sediment, nutrient or pathogen loading…"

The fact that some sites in the receiving waters of Tomales Bay are heavily impacted by runoff suggests that "there needs to be continued implementation of Management Practices (MPs) on

[5] See Tomales Bay Watershed Council Webpage - http://www.tomalesbaywatershed.org/trends/tm-outerbay.html

agricultural lands in the watershed over the long term to realize real water quality improvements."

Response to Comment No. 3.1
Please see response to Key Comment No. 4 and No. 5.

Board staff agrees that watershed-scale improvements or reductions of pathogens and sediment loading have not yet been achieved. Staff supports continued implementation of this Grazing Waiver, in conjunction with implementation of source control requirements identified in the TMDL for septic, horse and dairy facilities, boat discharges, waste water treatment facilities, and stormwater to realize long term water quality improvements in the Tomales Bay watershed.

We agree that continued implementation of management practices is still necessary. Board staff will be conducting field inspections to ensure water quality based management practices are implemented as designed for parcels operating under the Grazing Waiver.

Comment No. 3.2
"Non-point source pollution is by nature, diffuse across the landscape and requires an enormous investment in many small-scale efforts to improve water quality at the watershed scale. Because of the requirements of time and money to address such pollution, implementation of MPs should be targeted where they will have the greatest impact, or where the pollutant loads are greatest. Monitoring should be used as a tool to focus MP implementation."

Response to Comment No. 3.2
Please see our response to Key Comment No. 5.

Board staff agrees with the commenter's strategy towards identifying and implementing targeted management practices of high value to water quality. To achieve our shared goals, we have supported grant-funded projects directed at maximum water quality benefit and will continue to advocate for such projects.

We also agree that water quality monitoring may prove useful in focusing implementation. We note in Key Comment No. 5, above, however, that our limited monitoring resources to date have been used to assess ambient conditions rather than to target management practices or determine which facilities may require corrective action. That said, Board staff are open to working with stakeholders to consider revisions to the monitoring approach currently being used to refine our understanding of sub-watershed conditions. Where appropriate, we would support special studies to that end.

Comment No. 3.3
"The Water Board acknowledges that the conditions of the Waiver '… must include monitoring, unless the discharge does not pose a significant water quality threat' (pg. 3, section 4.c). However, Water Board staff has recently reduced the frequency of pathogen TMDL monitoring and is not currently implementing watershed scale monitoring of sediment and nutrients. As you are aware, the numeric targets for pathogen levels are very frequently and significantly exceeded at many sites across the impaired watersheds, and implementation of grazing Management

Practices often involves the use of public funds on private agricultural lands. Therefore, it is critical to have ongoing water quality monitoring to target implementation in a way that provides accountability of funding and direction of management practices to address pollution in a manner that ultimately achieves and maintains water quality objectives and beneficial uses."

Response to Comment No. 3.3
The Grazing Waiver contains requirements for compliance monitoring and reporting. The monitoring consists of visual inspections of the Grazing Operation to verify that selected management practices are performing to meet Grazing Waiver standards. The Waiver also requires visual inspections of the closest receiving water to the Gazing Operation to monitor for changes in water quality resulting from ranch operations, pre-rainy season and pre-and post-storm inspections of management practices, and measurement of RDM (see Key Comment No. 1).

While we have evaluated the distribution of water quality sampling stations for pathogens in the watershed from a spatial perspective, we have not reduced the sampling frequency for pathogens. Board staff, in conjunction with the Pt. Reyes National Seashore, has been conducting surface water monitoring for pathogens at 16 locations throughout the watershed on all of the important tributaries to the Bay and plan to continue that sampling into the foreseeable future.

We agree that we do not have a comparable level of monitoring for nutrients and/or sediments. At this time, given our limited resources, we do not feel that monitoring for nutrients and sediment is a critical need. Board staff plans to continue to invest our resources into the pathogen monitoring program.

Monitoring related to the effectiveness of implementation of management practices has been conducted in association with a State Water Board-funded grant program called "Conserving Our Watershed" (COW I, II, and III) grants. However this monitoring is not water quality- related. These grants are disbursed to the Marin Resource Conservation District (Marin RCD) to continue its stewardship program by completing management practices on rangelands. The grants include monitoring of project effectiveness at a minimum of 10% of the sites. That monitoring evaluates BMPs and physical impacts on creeks.

Comment No. 3.4
"… the California Water Code section 13269 includes specific provisions under Waivers of Waste Discharge Requirements, one of which states that monitoring results shall be made available to the public. The TBWCF maintain the most comprehensive water quality database for the Tomales Bay watershed and we strongly encourage the Waiver Program to share monitoring data with the public so that we may add it to the database to enable comparisons to historic and future data."

Response to Comment No. 3.4
Please see our response to Key Comment No. 5.

Board staff has consistently made its ambient water quality monitoring data available to any/all interested parties upon request, including to the Tomales Bay Watershed Council. In the future,

Board staff plans to make our water quality monitoring database available to the public through the CEDEN portal. In the interim, we plan to make it available on the Tomales Bay Pathogens TMDL webpage.

We agree that water quality monitoring data is crucial for evaluating progress in implementing the TMDL, as well as for demonstrating attainment of water quality standards and the effectiveness of our regulatory program.

Comment Email No 4
Commenter: Ms. Amy Trainer, Executive Director.
Affiliation: Environmental Action Committee of West Marin

Comment No. 4.1
"I am writing to express agreement with Gordon Bennett, President of Save Our Seashore, that the public notice is inadequate for the October 3, 2013 public workshop on the Tentative Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed…

In order to maximize the ability of all members of the public to attend the Grazing Waiver workshop, EAC also urges the Board to:

- *Schedule another public workshop with at least 30 days' notice; and*
- *Push back the public comment deadline to at least 30 days from the date of this additional workshop."*

Response to Comment No. 4.1
We understand your concern about the short time frame given for noticing the public workshop held at the Marconi Center on October 3. For various reasons, we had difficulties in securing a venue in the watershed. The Marconi Center was centrally located and seemed to be the best location for the public workshop. Following October 3, the next available date for the Center fell within the week of October 21, which would have been after the October 16 public comment period closing date. We also offered to have an additional workshop at our office in Oakland the week of October 7. Given that we wanted to hold the meeting local to the watershed and not make people travel a significant distance to attend the workshop, we opted to move forward with the October 3 meeting at the Marconi Center. After the October 3 workshop there was no further request for an additional workshop.

Board staff decided not to grant the request to extend the comment deadline due to the short notice of the public workshop because, in the end, there were ample opportunities for interested parties to ask clarifying questions of staff about the Grazing Waiver and for staff to provide the necessary responses. In addition to the workshop, Board staff also attended a September 11 Marin Farm Bureau meeting and a October 2 Sonoma County Animal Committee meeting to answer questions about the Grazing Waiver.

Comment Letter and email correspondence Nos. 5a-e
Commenter: Mr. Gordon Bennett, President
Affiliation: Save our Seashore

September 13, 2013 Email No. 5.a
Commenter: Mr. Gordon Bennett, President

Comment No. 5.a.1
The commenter requested records of the management practices implemented in the Tomales Bay watershed. The commenter further inquired if Water Board staff conducted inspections to verify implementation of management practices.

Response Comment No. 5.a.1
Please see Response included in the Board staff letter dated October 2, 2013 (Attachment B-2).

Comment No. 5.a.2
The commenter inquired about the NNA records on file with the Regional Water Board. Are the approved NNAs based on herd size, or on grazing acreage?

Response Comment No. 5.a.2
Please see Response to Key Comment No. 2 and Board staff letter dated October 2, 2013 (Attachment B-2). In addition, staff has added information to the Revised Tentative Order explaining more clearly the NNA records on file and added the NNA form as an attachment to the Revised Tentative Order.

Comment No. 5.a.3
The commenter inquired as to how water quality has improved in the watershed since the implementation of the 2008 Grazing Waiver.

Response to Comment No. 5.a.3
Please see Response to Key Comment No. 4 and Board staff letter dated October 2, 2013 (Attachment B-2).

September 27, 2013 Email No. 5.b
Commenter: Mr. Gordon Bennett, President

Comment No. 5.b.1
"In order to maximize the ability of all members of the public to attend the Grazing Waiver workshop, we urge the Board to:

- Schedule another public workshop with at least 30 days' notice; and
- Push back the public comment deadline to at least 30 days from the date of this additional workshop.

Such consideration is required for the public to have confidence in the Board's proposed Waiver of Waste Discharge Requirements."

Response to Comment No. 5.b.1
Please see Response to Comment No. 4.1.

September 28, 2013 Email No. 5.c
Commenter: Mr. Gordon Bennett, President

Comment No. 5.c.1
"Save Our Seashore is writing to express our concern and disappointment about the lack of adequate public notice for the upcoming public workshop on the Tentative Conditional Waiver of Waste Discharge Requirements Grazing Operations in the Tomales Bay Watershed."

"…the current deadline of October 16th makes informed comment difficult for public interest groups….I suggest a mid-November deadline for public comments…"

Response to Comment No. 5.c.1
Please see Response to Comment No. 4.1 .

October 2, 2013 Comment Letter No. 5.d
Commenter: Mr. Gordon Bennett, President

Comments provided in response to October 3, 2013 Board letter*:*

"The comparison (2004-2008 vs. 2009-2013) of pathogen "Exceedance Rates" appears to be the only basis for the Report Card's conclusion of "some improvement." Your letter also cites this comparison as the basis for the TO's conclusion of "some limited improvement." Yet the Report appears to give equal weight, at least visually, to each water-monitoring station (WS) regardless of the size of the watershed monitored."

Response to Comment No. 5.d.1
See Response to Key Comment No. 5. In addition, Board staff will conduct additional data analysis to weigh water quality data sampling results against the watershed surface area they represent.

Comment No. 5.d.2
"Thus it seems inappropriate to include [watersheds on public lands] in any assessment of the effectiveness of the Grazing Waiver on private lands where the question remains as to whether there has been sufficient (or any) ground-truthing."

Response to Comment No. 5.d.2
The public lands where grazing is conducted within the Tomales Bay watershed, such as on Point Reyes National Seashore properties, are required to seek coverage under the Grazing Waiver and meet the same performance and compliance requirements as any other private holding. Upcoming Grazing Operations site inspections will be conducted by Board staff independent of land ownership type.

Public lands used for grazing comprise a significant portion of the watershed. It is, therefore, not reasonable to exclude these lands from an assessment of the program. In many cases, the public lands are operated by ranching families who historically owned the same properties now held under public trust and have been, over time, implementing management practices to protect water quality.

Comment No. 5.d.3
"The critical data is the amount of rainfall immediately preceding the sample, yet this appears to be entirely missing from the Report and its Excel spreadsheet, rendering (in our opinion) any meaningful analysis (or conclusion) unreliable to an unknown extent."

Response to Comment No. 5.d.3
In upcoming analysis, Board staff will include the historical rainfall information for the water quality stations at the time of sampling. This information will be dependent on rain gauge proximity to the sampling station and rainfall/precipitation data availability.

Comment No. 5.d.4
"Lastly, the Report Card also provides a graph of post- vs. pre-Waiver geo-means for "Shellfish Use" in Tomales Bay based on "Dry Weather" samples. No doubt "dry weather" water quality is important to the shellfish industry, but the graph seems to focus attention on a point that appears not to be at issue. It would seem more likely that the key issue is the "wet weather" rainfall closures in Tomales Bay, which average 58% closures during the winter season. That is unlikely to be a trivial impact on the local shellfish industry."

Response to Comment No. 5.d.4
Board staff appreciates the statistical analysis provided by the commenter showing an upward trend for the number of shellfish closure days between 2005 and 2011. Given that wet-weather shellfish closures are dictated by rainfall thresholds rather than water quality data, it follows that the annual range of shellfish closure days should mirror precipitation. Without water quality sampling results reported for pathogens, these closures correlate to the amount of precipitation for a given year.

For the progress report (Attachment B-1), Board staff used California Department of Public Health data, which are collected by shellfish growers. Since shellfish growers only collect data during the dry-weather period (e.g., any day with 0.4 inches of rain or less), the progress report was limited to data representing those time periods. Board staff supports water quality data collection during wet weather and will explore the possibility of collecting/obtaining such data in the future.

October 8, 2013 Email No. 5.e
Commenter: Mr. Gordon Bennett, President

Comment No. 5.e.1
"I believe that required RDM monitoring is a good idea in the proposed Waiver, but the actual implementation may be difficult without RWQCB's own "experienced range managers" on the ground for site visits. Conversely, if the Waiver is adjusted to accept RDM reports from external

"experienced range managers," the RWQCB will need to vet acceptable "range mangers," some of whom in Marin have put ag politics ahead of hard science."

Response to Comment No. 5.e.1
As noted in Key Comment No. 1, Board staff agrees that proper training is required to assess RDM and will therefore partner with local organizations, including the UC Cooperative Extension, Marin RCD, and others to make sure that Landowners/Operators have the necessary training to assess and report RDM, as required, in a cost effective manner. Additionally, Board staff will be appropriately trained in RDM assessment and interpretation.

Furthermore, staff recognizes the existence of a Certified Rangeland Manager (CRM) program. The CRM license is required by law and public resources code for professional range management activities on non-federal, State, and private forested landscapes in California, unless the work is performed personally by the owner of the land.

Although enrollment in the CRM certification program is not a requirement of the TO, and the TO does not require that the assessment of RDM be made by a CRM, rangeland manager professionals may be a valuable resource for additional training in RDM assessment and in topics beyond the scope of the Grazing Waiver.

Comment Letter No. 6: Ms. Nancy Scolari, Executive Director.
Affiliation: Marin Resource Conservation District

Comment No. 6.1
"Compliance with the Tomales Bay Pathogen TMDL has been a dedicated community effort since its adoption and therefore we suggest providing a summary of progress to date to describe the work completed since its adoption in 2005."

Add in the Grazing Waiver (page 1) to read, *"since adoption of the TMDL in 2005, the State Water Resources Control Board has contributed $620,523 to construct 37 MPs. SWRCB funds have been matched by contributions totaling $394,403 made by enrollees, local, state and federal sources. Approximately forty-eight additional practices will be completed by the end of 2014."*

Response to Comment no. 6.1
We agree that compliance with the Tomales Bay Pathogen TMDL has been a dedicated community effort. We have revised the statement in Section 1 (page 1) of the TO, as follows: *"Since adoption of the TMDL in 2005, the State Water Board has contributed significant resources to assist in the implementation of the Tomales Bay Pathogens TMDL. These resources have been matched by contributions made by enrollees, local, State and federal sources and have resulted in the implementation of management practices to control pathogen discharges as required by the TMDL."*

Comment No. 6.2
Edit the Grazing Waiver (page 2) to read, *"since Water Board adoption of the 2008 Waiver, water quality data within the watershed suggests ~~has shown~~ some ~~limited~~ improvement. [Insert*

water quality trend information here]. Further improvement is expected as all dischargers (wastewater treatment facilities, septic homeowners, boat dischargers, etc.) obtain coverage under the Order and complete implementation of MPs and other implementation actions identified in the Tomales Bay Pathogen Total Maximum Daily Load (hereinafter referred to as TMDL)."

Response to Comment No. 6.2
Please also see Response to Key Comment No. 4.

We agree, and have revised the statement in Section 1, page 2 to read, *"since Water Board adoption of the 2008 Waiver, water quality data within the watershed suggests some improvement.* Further improvement is expected as all eligible grazing operations obtain coverage under the Order and other dischargers in the watershed (e.g., septic systems, dairies and equestrian facilities) complete implementation actions identified in the Tomales Bay Pathogen total maximum daily load (hereinafter referred to as TMDL)*."*

Comment No. 6.3
"The definition of all grazing operators as "dischargers" is inaccurate since not all of our watershed area and grazing operations are resulting in a discharge to waters."

Edit the definition of Discharger (page 3) to read, *"landowners and operators conducting Grazing Operations on Grazing Lands are potential dischargers (hereinafter referred to as Discharger(s)) as they discharge or propose to discharge waste that could affect the quality of waters of the State."*

Response to Comment No. 6.3
Please see Response to Key Comment No. 2.

Comment No. 6.4
"The addition of Residual Dry Matter sampling to the Annual Certification submittal warrants training provided to agricultural support agencies, organizations and ranchers. It is our hope that you will work with the University of California Cooperative Extension and other partners in developing a program that will inform and educate the ranching community in understanding this new requirement so that information is collected accurately. RDM alone as a regulatory tool may be problematic and we suggest careful consideration of other site conditions."

Response to Comment No. 6.4
Board staff agrees. Please see Response to Key Comment No.1.

Staff remains optimistic that local partners will step forward and offer to assist Landowner/Operators in appropriate RDM assessment methodologies and how to interpret the results to adaptively manage their pastures with the goals that include protection of water quality.

Comment No. 6.5
Edit (page 20 of the TO) to read, "*the Discharger shall measure and record measurements of RDM prior to fall rains as specified in the University of California's California Guidelines for*

Residual Dry Matter Management on Coastal and Foothill Annual Rangelands, Rangeland Monitoring (2002) (Series Publication 8092)."

Response to Comment No. 6.5
We agree, and have edited the statement as suggested.

Section 6.f. (page 20) now reads: *"The Discharger shall measure and record measurements of RDM prior to fall rains as specified in the University of California's California Guidelines for Residual Dry Matter Management on Coastal and Foothill Annual Rangelands, Rangeland Monitoring (2002) (Series Publication 8092)."*

Comment Letter No. 7
Commenter: Mr. Justin Oldfield, Vice President, Government Relations
Affiliation: California Cattlemen's Association (CCA)

Comment No. 7.1
CCA stated that it appreciates Water Board staff's efforts in working with the University of California Cooperative Extension (UCCE) and the use of the Rangeland Water Quality Management Plan as a template.

Response to Comment No. 7.1
Board staff appreciate the collaborative relationship developed with UCCE over the years of TMDL development and implementation and look forward to maintaining this partnership. The Rangeland template is a critical tool in the of the ranch assessment process. UCCE does play a significant role in the Tomales Bay watershed, supporting Dischargers in developing water quality management plans.

Comment No. 7.2
"Unfortunately, the proposed waiver includes additional compliance requirements not part of the originally designed Rangeland Water Quality Management Plan and CCA believes these additions provide little benefit to the program and in turn will negatively impact a rancher's ability to successfully manage their land and water resources. Because of these concerns, CCA must respectfully oppose the adoption of the proposed waiver at this time."

Response to Comment No. 7.2
Please see Response to Key Comment No 1.

Since Grazing Waiver implementation began in 2008, Board staff has worked cooperatively with the ranching community and the watershed's stakeholders. The Grazing Waiver is implemented to protect and enhance water quality in the watershed. RDM is added as a reporting requirement to the Grazing Waiver to engage the ranching community in a dialog on protecting rangeland resources while preserving the agricultural economy.

Comment No. 7.3
The commenter does not think that all ranchers within the Tomales Bay watershed contribute to nutrient, pathogen or sediment water quality impairment and thus the waiver should only apply

to those ranchers who discharge or propose to discharge waste. It is their perspective that herd size on its own does not substantiate a potential for a grazing operation to pose a threat to water quality. "The California Water Code does not provide your staff the authority to assume that all ranchers grazing rangelands in the Tomales Bay watershed meet the conditions of the waiver discharge waste."

Response to Comment No. 7.3
Please see Response to Key Comment No. 2.

Comment No. 7.4
The commenter argues that although Residual Dry Matter (RDM) is a useful tool to assess the impact of stocking densities on available forage and achieve management objectives using different grazing regimes, it should not be substituted to exclusively represent "healthy" or "unhealthy" rangeland. Other types of monitoring are more suited to determine if management practices are effective and properly employed. Photo monitoring protocols have been developed to measure discharges of sediment and are simple, inexpensive and can provide a useful long term assessment. CCA urges the Water Board to substitute any requirement to report RDM with photo monitoring protocols already developed by UCCE extension agents that are proven to help ranchers measure the effectiveness of their ranch management plans in a cost efficient manner."

Response to Comment No. 7.4
Please see Response to Key Comment No. 1.

Comment No. 7.5
"[T]he waiver improperly presumes water quality impairments are caused by livestock and therefore controls are necessary. All potential sources of pathogen impairment should be properly identified prior to designating cattle as a greater threat to water quality than wildlife and to determine the proper adjustments to nutrient and pathogen load allocations for livestock to properly account for the contributions made by wildlife."

Response to Comment No. 7.5
Please refer to our responses to Key Comment No. 3 and No. 4, above.

The Water Code requires the Water Board to address controllable factors affecting water quality. Board staff recognizes an array of pathogenic sources contribute to water quality impairments in the watershed. Livestock is not the sole source of pathogen discharges.

Comment No. 7.6
"[I]t should be made clear that Regional Board staff have no authority to trespass on private property and must first seek landowner consent or obtain a warrant… Language in the draft waiver should be revised to ensure enrollees have a clear understanding of the rights afforded to them under law… As such, an appropriate and significant case must be presented by the Regional Board to justify any request for an inspection noticed by a 13267 letter."

Response to Comment No. 7.6
Board staff will not trespass nor seek access to private property without authorization from the Landowner/Operator or, in the unlikely case of a public emergency, without being accompanied by a warden, a police officer, or law enforcement deputy. To provide clarity to the process for conducting property inspections, Condition 3.b.i of the TO has been amended to read as follows: *"Except in cases of an unauthorized discharge or emergency circumstances, Water Board staff will typically contact Landowners/Operators a minimum of 72 hours prior to site inspection."*

According to California Water Code section 13267(a), a Regional Water Board may investigate the quality of any waters of the State within its region. Section 132679(c) allows the Regional Water Board to inspect the facilities of any person to ascertain whether the purposes of this division are being met and waste discharge requirements are being complied with. The inspection shall be made with the consent of the owner or possessor of the facilities or, if the consent is withheld, with a warrant duly issued pursuant to the procedure set forth in California Code of Civil Procedure section 1822.50 *et seq*.

Comment Email No. 8.a.
Commenter: Mr. Chris Sheuring, Legal Services Division
Affiliation: California Farm Bureau Federation

Comment No. 8.a.1
"In 2008, Farm Bureau raised a number of concerns with the waiver then proposed, including the importance of grazing contributions to coliform contamination relative to background or baseline levels of wildlife contributions, and whether the TMDL requirement for grazing was lower than the wildlife control from an earlier technical study. At that time, Farm Bureau indicated that the waiver's burden on agriculture through management practices, inspections, reporting, and the like are onerous at the farm level, and of questionable utility given the uncertainties of data which underpinned the waiver."

Response to Comment No. 8.a.1
Please see our response to Key Comment No. 3.

With respect to concerns regarding the Waiver's imposed burden on the agricultural community, since the 2008 Grazing Waiver's inception, the State Water Board has invested significant resources to water quality improvement projects in the watershed through the Conserving our Watershed program. These projects focus on the implementation of management practices and provide ranch planning assistance to the ranching community. Board staff intends to strongly advocate for continued funding to help offset the cost of implementation associated with Grazing Waiver compliance.

Comment No. 8.a.2
"The draft waiver appears to note that conditions have improved throughout the watershed during the recent period, and we believe it would be appropriate to both relax some of the more onerous requirements in the 2013 waiver as respects grazing operators, as well as conduct further study to ground the waiver – and future waivers – in solid scientific ground that will enable effective regulation calculated to address the true source of impairments, without unfairly

intruding upon the viability of family grazing operations that have been effective stewards of the landscape for generations."

Response to Comment No. 8.a.2
Please refer back to Key Comment Nos. 3, 4, and 5.

While the recent Tomales Bay watershed progress report suggests some improvements in water quality, it also shows that there is still more work to be done in implementing all reasonable and feasible pathogen source control implementation actions for the pathogen source categories identified in the TMDL.

Comment Letter No. 8.b
April 12, 2004
Commenter: Mr. Michael L. H. Marsh, Chief Executive Officer
Affiliation: Western United Dairymen
Chris Scheuring attached this 2004 letter to his comment letter and referenced it in full. Although the comments in this letter are directed to the 2008 Tomales Bay Pathogen TMDL, Water Board staff herein addresses comments that may be relevant to the TO.

Background
The 2004 United Dairymen letter, referenced as Comment Letter No. 8.b., above, is one of three attachments to the California Farm Bureau Federation letter (Comment Letter No. 8.a) dated October 16, 2013. The attachments, dated 2004 and 2008, provide comments that were previously submitted to the Water Board during: a) the development of the Tomales Bay Pathogens TMDL in the 2004-2005 timeframe, or b) as part of the Water Board's consideration for adoption of the 2008 Grazing Waiver.

Comment Letter No. 8.b, the focus of this response, commented on a March 12, 2004, Tomales Bay Pathogens Final Project Report (referred to as the "Tomales Bay Report" in the 2004 letter). The Final Project Report was informally circulated by Board staff just prior to the March 16, 2004 California Environmental Quality Act (CEQA) scoping meeting held for the Tomales Bay Pathogens TMDL project. Although formal responses to comments received on the March 2004 Final Project Report were not prepared by Board staff, many of the concerns and issues raised in Comment Letter No. 8.b were subsequently resolved through revisions to the Final Project Report and the TMDL Basin Plan amendment.

Specifically, the Final Project Report was revised following the July 2005 peer review of the draft TMDL and Basin Plan amendment and again following two rounds of public comment held on March 4, 2005 (45-day public review period) and again on July 8, 2005 (30-day public review period). In addition, the proposed TMDL and draft Basin Plan amendment were discussed and subsequently revised through the Water Board hearing process. Three Board hearings were held on the TMDL and draft Basin Plan amendment on April 20, June 15, and September 21, 2005 (TMDL and Basin Plan amendment adoption hearing).

Given this history, presented below are our responses to relevant issues raised in the April 12, 2004 letter.

Comment No. 8.b.1
"The Tomales Bay report emphasizes the need to demonstrate implementation. Certification in CDQAP (California Dairy Quality Assurance Program) should be vigorously encouraged by the regional board as satisfaction of the requirement as demonstration of implementation. We believe it is important to recognize CDQAP as a means of encouraging self-directed and sustainable environmental performance. We would appreciate language to this effect added to the report."

Response to Comment No. 8.b.1
The approved TMDL for Pathogens in the Tomales Bay watershed (2005) clearly acknowledges the existence of the Western United Dairymen and association of dairy farm families. The TMDL acknowledges their innovative management activities, including the development of an on-farm environmental stewardship program, called the California Dairy Quality Assurance Program (CDQAP).

Although the TMDL requires responsible parties within several pathogen source categories (i.e., septic, grazing lands, equestrian facilities, and dairies) to implement the measures identified in the Basin Plan, the TMDL allows third parties with expertise in implementation to assist dischargers with compliance assessment (by providing comment on implementation of appropriate management measures for each source type) and annual compliance reporting.

Comment No. 8.b.2
"We believe that this venue (Sonoma-Marin ARM), along with the Tomales Bay Agricultural Group, provides an effective means of communication and engagement between the Regional Board and the dairy industry.

We request that the Sonoma-Marin ARM be emphasized in the report as an important vehicle to help address water quality issues related to dairy farms."

Response to Comment No. 8.b.2
Tables 21–27[6] of the final Tomales Bay Pathogens Staff Report describe the recommended implementation actions to be performed by the Water Board and other parties to implement the Tomales Bay Pathogens TMDL. The implementation actions described in Tables 21–27 are more detailed than the actions included in the Basin Plan amendment language adopting this TMDL. Tables 21–27 are intended to serve as guidance and clarify the intent of the regulatory action.

Table 23, specifically, acknowledges the Sonoma-Marin Animal Resource Committee and the committee's support for dairy operators in their efforts to solve waste control problems and locate financial assistance. The staff report states that the committee serves as a vehicle through which the Water Board and the Department of Fish and Game disseminate information on water quality regulations and requirements.

[6] See Regional Water Quality Control Board webpage - http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/tomalespathogens/12-21-05finalstaffreport.pdf

Comment No. 8.b.3
"It seems appropriate, considering the unique characteristics of Tomales Bay and its tributary watersheds, to question the validity of using water quality standards of 14 MPN/100 ml, 200 MPN/100 ml, and 2,000 MPN/100 ml, especially in wintertime storm events. We support additional work leading to developing a site-specific set of water quality standards for Tomales Bay."

Response to Comment No. 8.b.3
Appendix D, Staff Responses to Comments, Part I, of the September 21, 2005 Staff Summary Report for the Tomales Bay Pathogens TMDL, consolidates staff responses to comments raised during the March 4 and July 8, 2005, public comment periods and to comments and issues raised at the April 14 and June 15 public hearings on the draft TMDL and proposed Basin Plan amendment.

Roughly twelve commenters stated that the proposed coliform bacteria targets and load allocations for the tributaries were too stringent and perhaps unattainable. In turn, Board staff raised the tributary target from 43 to 200 MPN fecal coliform/100 ml in the tributaries because shellfish harvesting is not one of the beneficial uses for the tributaries. Staff further revised the Basin Plan amendment to expressly state that the tributary targets are intended for recreational uses.

Furthermore, to answer the question regarding what tributary coliform concentrations are needed in order to attain Bay water quality standards and protect shellfish harvesting (the most sensitive beneficial use in the Bay), staff re-ran a Bay-specific hydrodynamic model to identify the maximum bacteria levels that can be discharged to the Bay via tributaries and still protect the Bay's beneficial uses. The revised simulation accounted for bacteria die-off, a naturally occurring phenomenon.

After considering the results of this modeling effort, the staff report was changed to include geography-based allocations that apply at the bottom of Walker and Lagunitas creeks where they discharge to the Bay. These allocations reflect the highest fecal coliform concentrations that can be discharged from the tributaries while still protecting shellfish harvesting.

Comment No. 8.b.4
"We are aware of some [dairies] that have actually decreased their herd size substantially. We would appreciate it if you would review the document and consider removing or clarifying text that is not factually supported, which may be subject to misinterpretation, or which may unnecessarily provoke undocumented accusations."

Response to Comment No. 8.b.4
Section 2.5 (Land and Water Uses) of the Final Staff Report was modified to clarify and acknowledge that since some dairies have switched to raising beef cattle and others have increased the size of their dairy herds, the current total number and type of animals in the Tomales Bay watershed is unknown.

Comment No. 8.b.5
"The attrition in the Marin dairy industry over the last 14 years is not accurately reflected in the statistics of Table 13 (Tomales Bay Land Use Acreage by sub-watershed).
Specific information on each individual dairy farm is now available to you from the inspection reports performed by Regional Board staff in 2002 and 2003. Additionally, every dairy in the region is now filing new Reports of Waste Discharge. We suggest that since new data have been recently acquired and is easily available, that a more current compilation should be performed before the report is presented to your board."

Response to Comment No. 8.b.5
The staff report was updated to account for current (as of 2004) dairy waste discharge requirements inspection data and to acknowledge the number of dairies in the watershed.

Comment No. 8.b.6
"We were quite surprised to note that in Table 18, boat discharge is described as only "Potentially Significant." We suggest that since the 1998 incident that caused illness in 171 people was traced to a virus of human fecal origin, and was generally considered to be from a boat discharge of some sort, the level of significance should be rated the highest possible. It is rather disingenuous to think that discharge of human waste from a boat on the bay is of less concern from a public health and safety standpoint than animal manure applied to cropland several miles upstream in a sub-watershed tributary to the bay."

Response to Comment No. 8.b.6
The discharge of untreated, raw sewage/human waste is a Basin Plan prohibition and is of great concern to the Water Board. Furthermore, as part of the Gulf of Farallones National Marine Sanctuary, Tomales Bay is designated as a no-discharge zone and discharges of untreated sewage into the Bay are prohibited.

Page 50 of the Final Staff Report states that "although both human and animal waste is associated with a variety of bacterial and protozoa pathogens, human waste can also contain viral pathogens, which are of greatest concern to human health." On page 52, the staff report states, with respect to boat discharges, "since the wastes are of human origin, these potential discharges pose a significant threat to water quality and public health."

Comment No. 8.b.7
"We offer that it is inappropriate to place additional requirements on dairy farms that have accomplished and maintained compliance with California water and environmental law. Developing a substantially better understanding of the entire watershed system and its naturally occurring performance and actions is needed before our members should be asked to dedicate more of their already scarce resources to this task."

Response to Comment No. 8.b.7 – The Tomales Bay Pathogens TMDL does not place additional requirements on dairy farms beyond what those that were established in 2003, when the Water Board inspected dairies in the region and evaluated them for inclusion either under a waiver of WDRs or general WDRs. The TMDL and Basin Plan amendment require compliance with existing WDRs and waivers of WDRs and add no additional burdens onto dairies. However,

some additional requirements for grazing lands and pasture lands are included for all grazing land operations and will apply to dairies as appropriate.

As of fall 2013, Board staff is in the process of renewing the 2003 Confined Animal Facility Orders and will propose to include a grazing management element in the revised orders to account for grazing operations associated with dairies. Including the grazing element in the revised orders will streamline permitting for dairy operators and allow coverage of all their site operations under one permit, rather than requiring a permit for the dairy operation and a second permit for the grazing operation.

Comment Letter No 8.c
June 18, 2008
Commenter: Mr. Dominic Grossi, President
Affiliation: Marin County Farm Bureau
Chris Scheuring attached this 2008 letter to his comment letter and referenced it in full. Although many of the comments in this letter are directed to the 2008 Tomales Bay Pathogen TMDL, staff herein addresses comments that may be relevant to the TO.

Comment No. 8.c.1
"First, under the Compliance Monitoring and Reporting I have some concerns about the "Pre-Storm", "during extended storms", and after "actual storms" inspections. This seems to be excessive and will become burdensome on our ranchers. Since you are looking at applying monthly inspections already it does not make since to inspect again just a few days later if the meteorologists now say a storm might be coming.

Also, "during storm" inspections are very difficult and will not give you much information. For example, if there is some erosion on a road during a storm, that erosion will still be noticeable after the storm. And during the storm there is nothing that you can do right then anyway, trying to fix it in the middle of the storm will only cause additional erosion. The key is to have effective post storm season inspections and if problems arise then solutions to fixing them should be added to the ranch plans."

Response to Comment No. 8.c.1
The Compliance Monitoring sections 6.c. and 6.d. of the TO require Landowners/Operators enrolled under the Grazing Waiver to conduct site inspections twice during the dry season and at least monthly during the rainy season. One of the dry season inspections is considered a "site readiness" inspection to ensure the ranch preparedness for the rainy season. The inspections are necessary to determine the effectiveness of the management practices being implemented at the Grazing Operation.

We understand that "during storm" inspections may be both difficult and dangerous to perform. Recognizing this, the TO states that a "Discharger is not required to perform inspections during dangerous weather conditions or when a storm begins after scheduled ranch operating hours." While taking into account the safety of these inspections, Board staff recommends a pre- and post- storm inspection to address potential impacts to management practices.

Comment No. 8.c.2
"Next, In the Notice of Intent Attachment A Section VI. Implementation of Waiver of WDRs Conditions: Clarification is needed. Part A seems appropriate if the grazer is already participating in a waiver program. Part C seems appropriate for those who already have a plan. If an applicant does not have a plan but will be developing one what does an applicant mark? Part D has what appear to be two duplicative options."

Response to Comment No. 8.c.2
This comment refers to the draft Notice of Intent (NOI) that was circulated for public comment prior to adoption of the 2008 Grazing Waiver. The NOI was updated back in 2008 to respond to these comments. No changes have been made to the current NOI.

Comment No. 8.c.3
"Also, Attachment B seems to be more about what the ranch looks like than about grazing. There are lots of questions about road erosion, crop fields, creeks and riparian areas. Maybe we should help to clarify this part of the Grazing Waiver so that it is more about grazing."

Response to Comment No. 8.c.3
No changes to the current TO were made based on this dated comment. For background, the checklist (Attachment B of the 2008 Grazing Waiver) draws a nexus between grazing activities and the site features that may be sensitive from livestock use and includes, as the commenter notes, questions regarding roads, nutrients and pathogens, riparian areas, etc. Using the completed checklist, the Discharger may fine tune the location(s) of management practices, and/or decide to implement additional water quality improvement measures.

Comment No. 8.c.4
"I question whether there is sound science that proves that cattle grazing will increase the production of methylmercury. Have there been tests that show when cattle are in those fields more methylmercury is produced, perhaps the rainfall is all it takes to wash more mercury out of the soils."

Response to Comment No. 8.c.4
Due to the importance and prevalence of mercury contamination in the Tomales Bay watershed, the Water Board adopted the Walker Creek and the Tomales Bay Mercury TMDLs in 2007 and 2012 respectively. Both TMDLs provide the science behind the production of methylmercury in estuarine settings.

The TMDLs found that mercury-laden sediments originating from the former Gambonini mercury mine have accumulated as sediment deposits along the lower reaches of Walker Creek. The TMDLs found that sediment-bound inorganic mercury can be converted to methylmercury and bio-accumulate in the food web. Geochemical conditions found in estuarine sediments, similar to what we see at the mouth of Walker Creek, are often highly conducive for producing methylmercury.

Although the release of mercury-rich sediment was abated through mine site remediation (1999-2000), there exists legacy mercury-rich sediment deposits that have been buried with time

downstream of the mine. The goal of the Grazing Waiver is to keep cattle from disturbing these buried sediments and/or causing them to become re-suspended, transported downstream and deposited in the estuary, where the conditions exist for methylation to occur.

Comment Letter 8.d
August 2008
Commenter: Farm Bureau
Chris Scheuring attached this 2008 letter to his comment letter and referenced it in full. The concerns in this letter are directed to the 2008 Tomales Bay Pathogen TMDL, and the 2008 Waiver. Staff herein addresses comments that may be relevant to the TO.

Comment No. 8.d.1
"the Regional Board's staff have refused to consider wildlife as a major source of fecal coliform, and most important, have refused to do the proper experiments to determine the contribution of wildlife, in clear violation of EPA guidelines."

"The Waiver imposes expensive and onerous requirements on Farm Bureau members in this watershed without any evidence that the grazing operations are significant contributors to coliform contamination in Tomales Bay. These requirements will threaten the economic survival of many ranches owned or operated by Farm Bureau members in the watershed. It is unfair to impose such a hardship on these Farm Bureau members before doing a study, using widely accepted nationally-used methods, to determine whether the ranches are a significant source of coliform contamination."

Response to Comment No. 8.d.1
Please see Response to Key Comment No. 3.

Comment Letter No. 9
Commenter: Mr. David J. Lewis, Director and Watershed Management Advisor
Affiliation: University of California Cooperative Extension, Marin County

Comment No. 9.1
The commenter stated that open space lands do not achieve waste load allocations (i.e. water quality objectives) on a year round basis: "The East Shore Coastal Tributary and White Gulch sites, within the Tomales Bay Watershed Council monitoring program, and Watershed Site 6 (same as East Shore Coastal Tributary) within the Water Board monitoring program, represent this type of open space and terrestrial wildlife source. Fecal coliform levels from these sites do at times exceed these allocations both prior to and after the implementation of the TMDL and the Conditional Waiver. These results provide some of the context needed to understand background levels of bacteria within the watershed and that the load allocations are not attainable 365 days a year even in these open space watersheds. These results also raise the question of which Beneficial Use is applicable for which part of the watershed. The load allocation tables apply the Shellfish Harvesting and Contact Recreation (Rec-1) uses. In many locations in the watershed Noncontact Recreation (Rec-2) may be more appropriate."

Response to Comment No. 9.1
Please see our Response to Key Comment No. 3 and No. 4.

Board staff recognizes the contribution of wildlife to the pathogen signal in the watershed. However, in order to make a finding that contact recreation is not an appropriate beneficial use, Board staff would have to conduct a Use Attainability Analysis (UAA) and demonstrate why the recreational contact use should be removed. There is insufficient information at this time to support the commenter's recommendation to apply water quality objectives supportive of noncontact recreation, in lieu of the load allocations defined in the TMDL. Staff anticipates looking further into the issues raised by the commenter regarding attaining standards where there are no anthropogenic sources.

Comment No. 9.2
"There is an opportunity for all involved in the Conditional Waiver Renewal to be leaders in Nonpoint Source Pollution Management by conducting a comprehensive review of the TMDL and watershed conditions." The community being regulated needs this evaluation so that data and science are used to confirm and revise water quality objectives and the load allocations, so the Conditional Waiver Renewal is based upon watershed conditions. The commenter suggests the TMDL be reviewed in line with the adaptive management process discussed in the TMDL and provides a list of information sources that should be considered.

Response to Comment No. 9.2
Please see our Response to Key Comment No. 3 and No. 4.

Comment No. 9.3
"To put the use of RDM in the proper framework as a tool for monitoring and not a regulatory standard, Section 6.f. Compliance Monitoring and Reporting (Page 20) should have the last sentence deleted or rewritten to remove any reference to RDM as a target, standard, or criteria and with language acknowledging conditions and factors that would require management of RDM levels below recommended ranges."

Response to Comment No. 9.3
Please see Response to Key Comment No. 1.

Attachment C-1: Total Maximum Daily Load Progress Report for Tomales Bay Pathogens
Attachment C-2: Regional Water Board staff letter, October 2, 2013

ATTACHMENT C-1

TOTAL MAXIMUM DAILY LOAD PROGRESS REPORT FOR TOMALES BAY PATHOGENS

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Total Maximum Daily Load Progress Report	
Regional Water Board	**San Francisco Bay, Region 2**
Beneficial uses affected:	REC-1, REC-2, SHELL
Pollutant(s) addressed:	Pathogens (Fecal Coliform)
Implemented through:	WDRs, Discharge Prohibitions, NPDES Permits
Approval date:	January 10, 2007

Tomales Bay Pathogens TMDL

STATUS

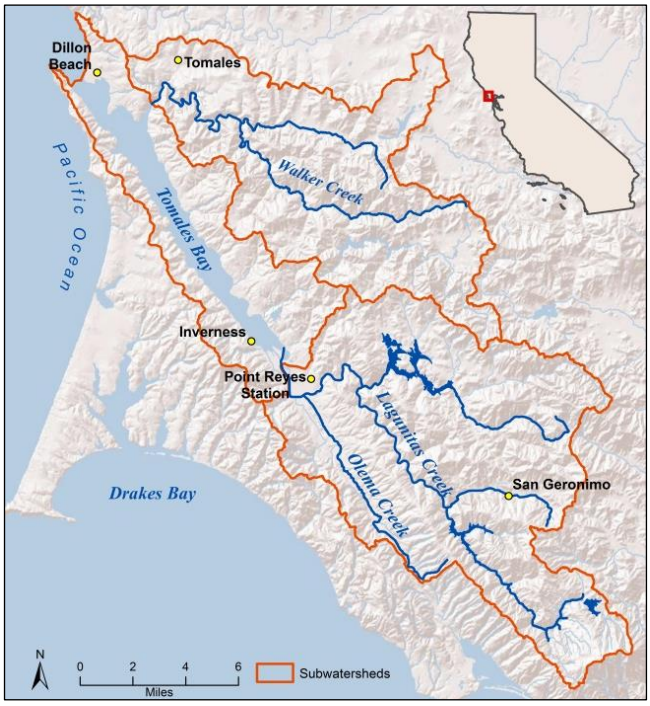
- ☐ Conditions Improving
- ☐ Data Inconclusive
- ☑ **Improvement Needed**
- ☐ TMDL Achieved/Waterbody Delisted

TMDL Summary

Tomales Bay and its main tributaries are impaired by pathogens. We infer the presence of pathogens from high fecal coliform bacteria (pathogen indicator) concentrations. Pathogens pose potential health risks to recreational users (REC-1) and shellfish consumers (SHELL). The main sources of pathogens to the bay and its tributaries are on-site wastewater treatment systems (OWTSs), small wastewater treatment facilities, boat discharges, grazing lands, dairies, equestrian facilities, and municipal runoff. The San Francisco Bay Regional Water Board adopted a TMDL for Tomales Bay that was approved by the U.S. EPA in January 2007.

The TMDL is implemented through a broad-based strategy for reducing pathogen sources to the bay and its tributaries. Implementation actions include prohibitions of discharge for OWTSs, wastewater treatment facilities, and boats, increased regulation of grazing lands, dairies, and horse facilities through waste discharge requirements (WDRs), and the Statewide Phase II NPDES municipal stormwater permit. Water quality data is reviewed every five years to determine the success of implementation actions and to see if targets have been achieved.

Tomales Bay Watershed



TMDL Waste Load Allocations/Load Allocations[a]

Waterbody	Numeric Targets for Fecal Coliform by Beneficial Use (MPN[a]/100mL)[b]	
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[a] Most Probable Number.

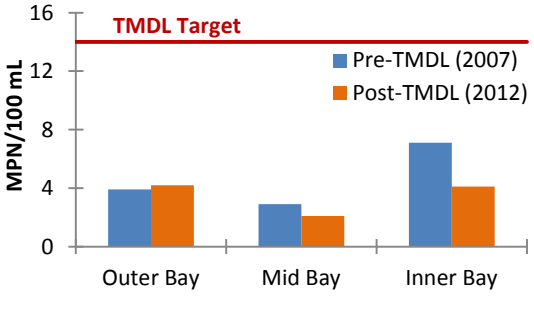
[b] Based on a minimum of five consecutive samples equally spaced over a 30-day period.

Water Quality Outcomes

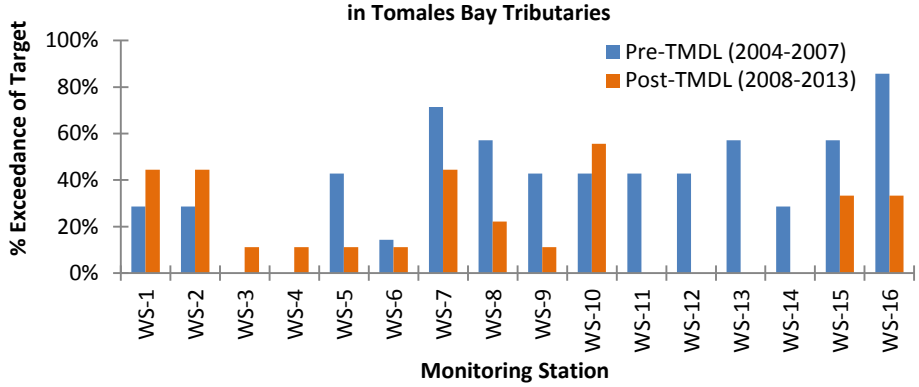
- *Water quality data show fecal coliform concentrations are consistently meeting water quality objectives for SHELL during dry weather periods.*
- *Water quality data show the degree of exceedance of the REC-1 TMDL targets has been greatly reduced; however, exceedances are still common at most monitoring stations.*
- *Water quality data show some improvement in water quality. However, additional monitoring is needed to assess water quality trends, such as wet weather SHELL beneficial use.*
- *Additional water quality improvement is needed to achieve TMDL REC-1 water quality objectives in the tributaries.*

Tomales Bay Water Quality

Geometric Mean of 30 Samples, Used to Evaluate Dry Weather[c] SHELL Beneficial Use in Tomales Bay



Percent Exceedance of REC-1 Numeric Targets in Tomales Bay Tributaries



[c] Dry weather is any day with less than 0.4" of rain

Updated September 2013

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ATTACHMENT C-2

REGIONAL BOARD STAFF LETTER
OCTOBER 2, 2013

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CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

San Francisco Bay Regional Water Quality Control Board

October 2, 2013
Tomales Bay Pathogen TMDL
ECM No. 717710

Mr. Gordon Bennett
President
Save our Seashore

Sent via email to GBatMuirB@aol.com

Subject: Information Request related to the Tentative Order for Renewal of Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed

Dear Mr. Bennett:

This letter provides the Water Board staff response to the September 13 "Save our Seashore" information request received on the Tentative Renewal of Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed (Tentative Order).

Information Request 1: *Data Relative to Ground-Truthing of Management Practices Effectiveness*

The Tentative Order states that:
..."enrollees have been engaged in an adaptive process, and have implemented grazing management practices (hereinafter referred to as MPs) such as nutrient and riparian management. Enrollees evaluated the effectiveness of these practices in controlling fecal coliform and sediment non-point source pollution from grazing activities."

Please provide data on how many such practices were asserted to have been implemented. Has there been any ground-truthing of whether practices claimed implemented were actually implemented? If so, please provide the data on how many ground checks were done and the percentage of those asserted implementations checked that were determined to have been actually implemented. If so, did any of these ground-truthings evaluate or quantify the effectiveness of these practices? If so, please provide that data.

Response: Starting in 2008, near the time the Grazing Waiver was adopted, the State Water Resources Control Board (State Board) funded and oversaw a series of "Conserving Our Watershed" (COW I, II, and III) grants awarded to the Marin Resource Conservation District (Marin RCD). These grants funded:

- Rangeland Management practices to reduce pathogens, sediment and nutrients;
- Ranch planning assistance;
- Fifty year Programmatic review of Marin RCD activities; and

- Development and implementation of a monitoring program (Riparian Zone Management Plan).

These programs fund management practices implemented by ranchers in the Tomales Bay watershed. While the COW II grant addresses management practices to harness pathogens, sediments and nutrients, the COW III is solely geared towards pathogens. We are working with the Marin RCD to gather the data about the number of management practices that have been implemented and will send that information to you.

Between 2005 and 2013, the National Park Service completed rangeland water quality projects within the Tomales Bay watershed. The management practices implemented include road improvements, stream crossings, and potable water availability to livestock. These management practices are included for your review on the enclosed maps.

Water Board staff have not yet had the available resources to ground-truth implementation of these practices. Our more recent focus has been conducting inspections of dairy operations, since these operations have historically exhibited a significant potential for causing water quality impacts. Staff has also been focusing our efforts on identifying eligible grazing operations to improve enrollment in the Tomales Bay Grazing Program. In June 2011, staff provided the Water Board with a status report on the Tomales Bay Grazing Program. Most recently, with the addition of new staff, we are anticipating conducting grazing lands inspections beginning in the fall of 2013/2014, which will assess implementation of management practices.

Information Request 2: *Data to support Notice of Non-applicability Issuance Criteria*

Page 1 of the Tentative Order also states: "112 property owners have submitted a Notice of Non-applicability whereas their herd size does not pose a threat to water quality." Please provide the information to support this and provide criteria for "Non-Applicability."

Response: Thank you for bringing this request to our attention. The information provided in the Tentative Order is incorrect and will be revised; herd size has not been a determining factor for issuance of notices of non-applicability in the Tomales Bay watershed. Instead, notices of non-applicability were issued by Water Board staff based on four general criteria (note that the number of parcels is greater than the number of property owners):

a) Grazing parcels located outside the Tomales Bay watershed - 73 parcels fall within this category.
b) Non-grazing agricultural activities (agricultural commodity operations (such as orchards, vineyards, etc.) - 38 parcels fall into this grouping.
c) Non-agricultural land-uses (horse facilities, ranches with no grazing, parks and open space) - 13 parcels qualify for this category.
d) Dairies (permitted under separate Board Order) – 3 parcels fall into this grouping.

Information Request 3: *Data related to Water Quality Improvements in the Watershed*

Page 2 of the Tentative Order states: "Since Water Board adoption of the 2008 Waiver, water quality within the watershed has shown some limited improvement." However, this statement is without any data reference, so it is not clear whether it includes the substantial improvement (cited on page 8) in mercury that was due to the Board's cleanup actions. If so, then a combined "limited improvement" could mask the possibility that pollutants reasonably related to grazing could have actually have remained unchanged during the prior Grazing Waiver, which is a conclusion consistent with monitoring data collected by the Tomales Bay Watershed Council over the same period. Please provide the data that supports the Board's conclusion of "limited improvement."

Response: The statement regarding limited improvement applies specifically to pathogens and is based on our review of the available data. We have enclosed these data, and our analysis of the number of exceedances of bacteria water quality objectives for your review. The data indicate limited improvement in some of the stations sampled in the watershed and in Tomales Bay. As part of the Water Boards 2012/2013 performance report, we completed a report card for the Tomales Bay Pathogen Total Maximum Daily Load. That report card, based on the same data, is available at:
http://www.waterboards.ca.gov/about_us/performance_report_1213/plan_assess/docs/fy1213/11112_r2_tomalesbay_pathogens.pdf.

If you have any further questions, please contact Laurent Meillier at 510-622-3277 or by email at LMeillier@waterboards.ca.gov.

Sincerely

Digitally signed by Naomi Feger
DN: cn=Naomi Feger, o=SF Bay Water Board, ou=Planning Division Chief, email=nfeger@waterboards.ca.gov, c=US
Date: 2013.10.02 10:16:20 -07'00'

Naomi Feger
Planning Division Chief

Enclosures:
a. Tomales Bay and Watershed Fecal Coliform Sampling Data and Graphs
b. 2013 Tomales Bay Pathogens TMDL Report Card (web link provided above)
c. 2005 - 2013 National Park Service Completed Rangeland Water Quality Project Maps [Lagunitas-Olema and West Shore]
d. TMDL Status Report to the Water Board, June 2011 (web link provided above)

Copy to: Dyan Whyte, James Ponton, Laurent Meillier
San Francisco Bay Regional Water Quality Control Board

Completed Rangeland Water Quality Projects ~2005-2013:
Tomales Bay Watershed - West Shore - Marin County, CA

U.S. Department of the Interior
National Park Service
Point Reyes National Seashore

Tomales Bay

Completed Management Practice

- Controlled Crossing
- Headcut Repair
- Spring Development
- Tank
- Trough
- Exclusion Fence
- Road Improvement
- Water Development
- Major Road
- Tomales Bay Watershed
- Ranch Boundary

1 inch = 0.8 miles

0 0.4 0.8 1.2 1.6 Miles

N

Plot date: 09/25/2013 Imagery: 2009 NAIP

Completed Rangeland Water Quality Projects ~2005-2013:
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Tomales Bay

2 addtional Projects
South of Bay not shown
(J Ranch Water Developments)

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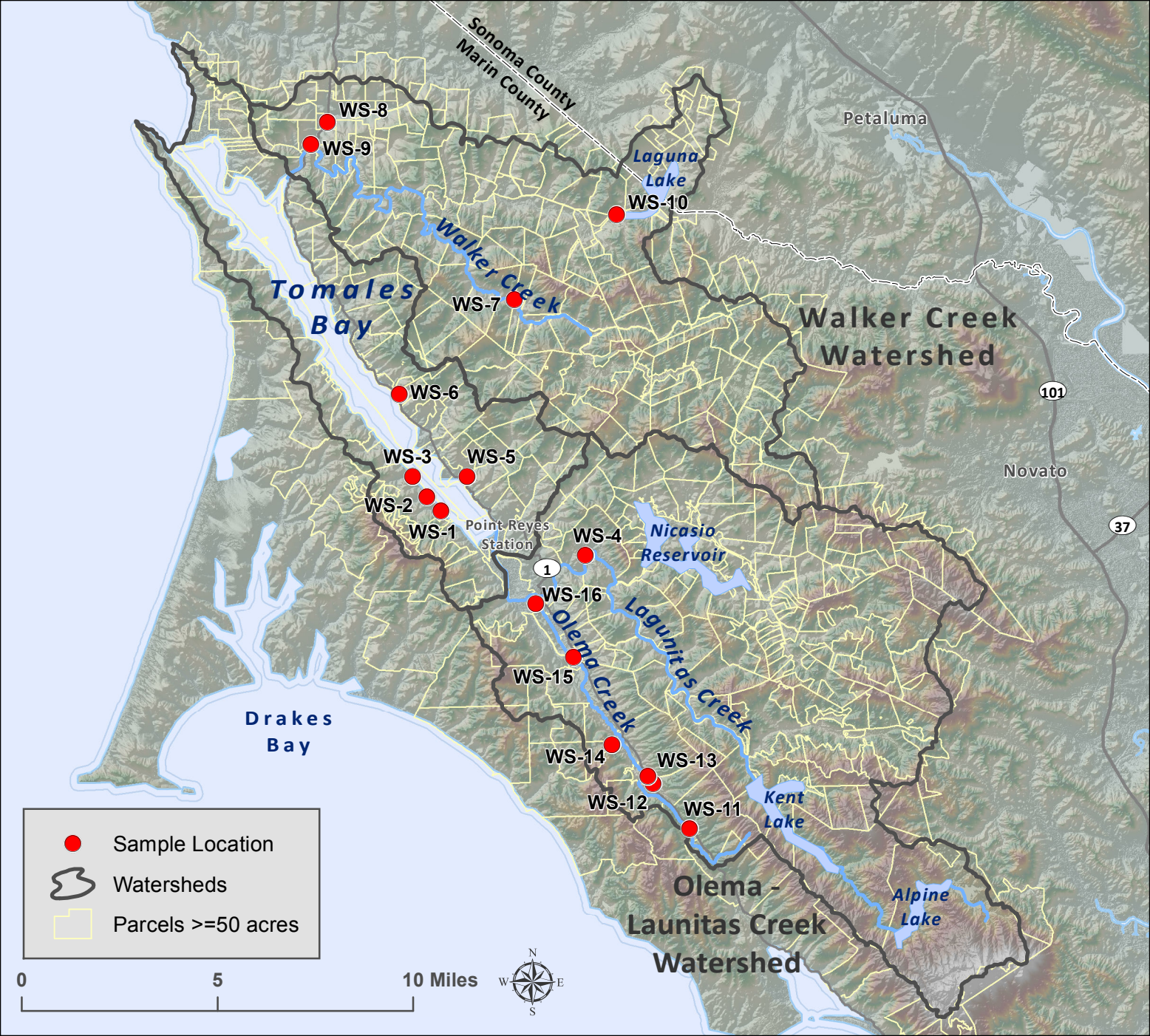
Sonoma County
Marin County
Petaluma
WS-8
WS-9
Laguna Lake
WS-10
Walker Creek
Tomales Bay
WS-7
Walker Creek Watershed
WS-6
101
WS-3
WS-5
Novato
WS-2
WS-1
Point Reyes Station
WS-4
Nicasio Reservoir
1
WS-16
Lagunitas Creek
Olema Creek
WS-15
Drakes Bay
WS-14
WS-13
WS-12
WS-11
Kent Lake
Olema - Launitas Creek Watershed
Alpine Lake
Sample Location
Watersheds
Parcels >=50 acres
0
5
10 Miles
N
W
E
S

Total Maximum Daily Load Progress Report	
Regional Water Board	**San Francisco Bay, Region 2**
Beneficial uses affected:	REC-1, REC-2, SHELL
Pollutant(s) addressed:	Pathogens (Fecal Coliform)
Implemented through:	WDRs, Discharge Prohibitions, NPDES Permits
Approval date:	January 10, 2007

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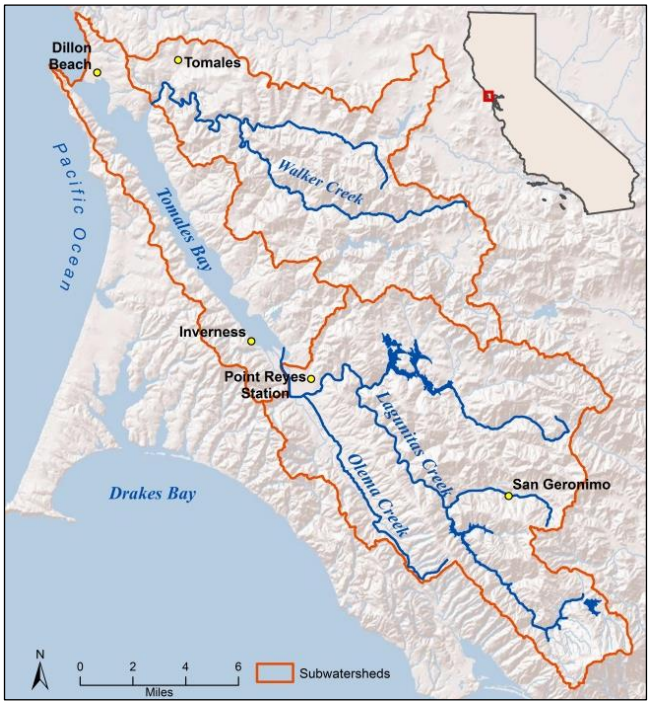

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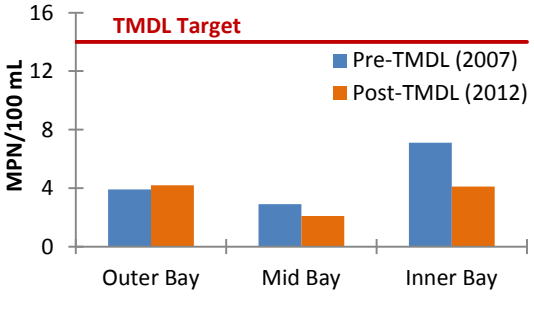

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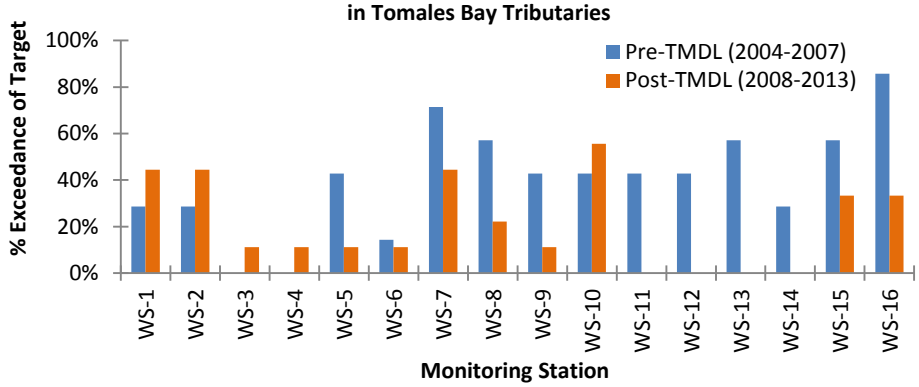

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Updated September 2013

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

STAFF SUMMARY REPORT (Carmen Fewless)
MEETING DATE: June 8, 2011

ITEM: **6**

SUBJECT: **Grazing Operations in the Tomales Bay Watershed -** Status Report on Waiver of Waste Discharge Requirements

CHRONOLOGY: July 2008 - Board adopted the Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed (Grazing Waiver)

DISCUSSION: *Summary:* We are seeing substantial progress in implementation of the Tomales Bay Watershed Grazing Waiver (Appendix A). Nearly all active grazing lands in the Tomales Bay watershed are now covered by the Grazing Waiver. A partnership of entities in the watershed is providing valuable compliance assistance to ranchers, and grant and contract funds have been awarded to assist the ranchers.

Background: The Grazing Waiver implements the Tomales Bay Pathogen Total Maximum Daily Load (TMDL) and the Walker Creek Mercury TMDL, adopted by the Board, and the State Water Board's Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program. The goals of the Grazing Waiver are to improve and protect water quality and biological resources while promoting sustainable grazing. Stormwater discharges from poorly managed grazing operations may contain pathogens, ammonia, salts, and excess sediment.

The Grazing Waiver applies to grazing parcels 50 acres or greater in size and requires landowners/operators (ranchers) to evaluate their grazing practices and to prepare and implement a comprehensive land management plan (Ranch Water Quality Plan) with appropriate management practices. The Plans are held at the facility and must be made available for inspection by Board staff. Ranchers are required to submit an Annual Certification and Compliance Monitoring Report by November 15 each year.

Status: We identified 241 active grazing parcels 50 acres or greater in size in the Tomales Bay Watershed based on a database provided by Marin County, and ranchers that own or operate on 230 of them have obtained coverage under the Grazing Waiver (95% enrollment rate). In 2009, we received annual reports covering 85% of enrolled parcels. In 2010, the submittal rate declined to 65% of enrolled parcels. In response, we issued Notices to Comply in February 2011 to the associated ranchers, which will result in annual reports for all but six parcels (97% submittal rate). Our next steps include potential further enforcement action such as sending Notices of Violation to those parcels that have failed to submit an annual report and coupling that effort with targeted field inspections.

We are creating a set of comprehensive GIS maps that will facilitate implementation efforts such as outreach, compliance, complaint response, yearly inspections, etc. The original database contained only parcel numbers, not physical addresses, making it unfeasible for us to find the location of a given parcel. When the maps are complete, we will visit the 11 parcels that are not yet covered by the Grazing Waiver, and, if they are indeed active grazing parcels, we will pursue enforcement.

Outreach: We have used a multi-pronged approach to reach and educate ranchers about the requirements and goals of the Grazing Waiver program. In addition to traditional public meetings, we have participated in various workshops hosted by local agricultural entities that were intended to assist ranchers with understanding the Grazing Waiver and complying with its requirements. In addition, we sent courtesy notification packages to ranchers targeted for coverage. These packages contained a letter that re-introduced the Grazing Waiver, provided a list of key requirements and submittal deadlines, provided a web-link to our Grazing Waiver program, and presented staff contact information.

*Partnership***:** The Marin County Resource Conservation District (RCD), Marin Farm Bureau, Marin Agricultural Land Trust, California Cattlemen's Association, Western United Dairymen, University of California Cooperative Extension, Point Reyes National Seashore and the USDA Natural Resources Conservation Service have convened the Tomales Bay Watershed Grazing Land Partnership. The Partnership provides Grazing Waiver compliance assistance and has provided a bridge for us to reach ranchers in the watershed.

Funding: The State Water Board has awarded substantial funding to help ranchers comply with Grazing Waiver requirements. Two grants totaling $1.425 million were awarded to the Marin RCD and a grant of $455,000 was awarded to the Point Reyes National Seashore to implement grazing management practices on ranches within the Seashore. In addition, two contracts totaling $230,000 from the State Board's Cleanup and Abatement Account were awarded to the Marin RCD to assist landowners within the Walker Creek watershed, which drains to Tomales Bay, with implementation of grazing management practices that address mercury, pathogen, sediment, and nutrient discharges.

Lessons Learned: Implementation of the Grazing Waiver has not been entirely smooth; there have been some issues with the information listed in the parcel database, and as a consequence, we have occasionally reached the wrong rancher or have sent documents to the wrong address. We are working on a more efficient way to identify and reach ranchers and account for submittals with the goal of making the reporting process as simple as possible. Also, our experience gained during the development and implementation of the Grazing Waiver has been valuable in the development of a grazing waiver for the Napa River and the Sonoma Creek watersheds that we will present to the Board for consideration later this year.

The waiver program is gaining acceptance by the regulated community. A big part of that success is rooted in the local relationships established with the Partnership, the substantial amount of technical assistance provided to ranchers that we and the Partnership are providing, and the success of partners in obtaining grants to assist the ranchers. The waiver program's success has also been noted in two recent publications: *California's Rangeland Water Quality Management Plan: An Update;* and *Opportunities to sustain "greener" farming: comparing impacts of water quality regulations in two catchments*.

RECOMMEN-
DATION: No action is necessary at this time.

Appendix A: Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed