

APPENDIX B

PUBLIC COMMENTS

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Meillier, Laurent@Waterboards

From: Zubkousky-White, Vanessa (CDPH-DDWEM-EMB)
Sent: Friday, September 13, 2013 4:48 PM
To: Meillier, Laurent@Waterboards
Subject: Grazing Waiver Question

Hello Laurent,

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.

On a related note. 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?

Hope you have a great weekend.

Thank you,
Vanessa

Vanessa Zubkousky-White
Environmental Scientist
California Department of Public Health
Preharvest Shellfish Unit
850 Marina Bay Pkwy., G165
Richmond, CA 94804
Phone (510) 412-4631
Fax (510) 412-4637
vanessa.zubkousky@cdph.ca.gov

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From: Meillier, Laurent@Waterboards
To: [Ponton, James@Waterboards](mailto:Ponton.James@Waterboards)
Subject: Zimmerman Rancher Tomales Bay Grazing Waiver Comment Received
Date: Wednesday, September 18, 2013 2:44:00 PM
Attachments: [Capture.JPG](#)

Jim,

We received a comment via voicemail from Mr. Mervyn Zimmerman 415-663-1217. I called him back to record his comment. He is concerned with bird populations overwhelming natural habitat on Hog Island (attached). According to Mr. Zimmerman the birds are causing damage to the vegetation which was not observed "10-15 years ago." Mr. Zimmerman stated the birds guano is killing the vegetation. He is not sure why the birds have taken residence on the island. He talked to the NPS about this issue. They told him Hog Island is protected habitat. Do you want me to circle back with NPS on this issue?

I shared with him the comment was not grazing related but I would make a record of our call. His ranch is in our grazing waiver database with a record of "no response." He requested a printed copy of the waiver as he does not have access to a computer/printer. I explained we'll need a signed copy of the NOI. I have a package ready for dispatch which would include the RWQP. May I include a note in the package to request his forwarding of the NOI by 11/29/13?

To note, the waiver includes the acronym CAFO which is not explicitly clarified. I made the change in the updated version.

Laurent.

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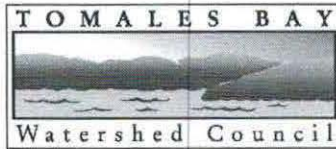
From: [Neysa King, Tomales Bay Watershed Council](#)
To: [Meillier, Laurent@Waterboards](mailto:Meillier.Laurent@Waterboards)
Cc: [Rob Carson](#); [Terry Sawyer](#)
Subject: TBWC Grazing Waiver Comments
Date: Monday, September 30, 2013 11:49:33 AM
Attachments: [TBWC_GrazingWaiverComments_Sept. 25 2013_FINAL.pdf](#)

Dear Laurent,

Attached please find our comment letter regarding the renewal of the Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed. We want our comments to become part of the official public comments collected during the comment period, and would like to know if you have scheduled a public workshop yet as part of the renewal process. If you cannot open the file (which is in PDF) or would like to receive a hard copy, please let me know. Also, if there is anything within this letter that you would like to discuss, please do not hesitate to contact me.

Please confirm receipt of this email at your earliest convenience.

Thank you,
Neysa King, Coordinator
Tomales Bay Watershed Council
PO Box 447
Point Reyes Station, CA 94956
406-728-5147
www.tomalesbaywatershed.org



Laurent Meillier
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612
LMeillier@waterboards.ca.gov

Sept. 25, 2013

Re: The Renewal of Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed (Conditional Waiver)

Dear Laurent Meillier, Directors and staff of the San Francisco Bay Regional Water Quality Control Board,

We, the Board of Directors, Water Quality Program Manager, and Coordinator of the Tomales Bay Watershed Council and its Foundation, appreciate the opportunity to comment and provide feedback on the renewal of the Conditional Waiver for Tomales Bay Watershed. This is a significant and critical program within our watershed, and we have worked in partnership with the Marin Resource Conservation District, County of Marin, Point Reyes National Seashore and other local partners towards achieving the goals of this program and the Pathogen TMDL for Tomales Bay, Lagunitas and Walker Creeks.

Since 2007, the Tomales Bay Watershed Council Foundation (TBWCF) has been monitoring the water quality at eleven tributary sites and four bay sites on a year-round basis (weekly wet-season and twice-monthly dry season samples through Sept. 2012). The existing program includes the analysis of pathogens (Total and Fecal Coliform Bacteria); nutrients (Nitrate, Total Kjeldahl Nitrogen—including organic nitrogen and ammonia); and sediment (turbidity), as well as field measurements of discharge rate, water temperature, salinity, dissolved oxygen and pH. Due to reduced funding, we now sample monthly year-round to continue data collection that will allow for long-term trend analysis. For more information about this program please see www.tomalesbaywatershed.org/Adopt.html.

In the Background offered for the Conditional Waiver of WDR's for Grazing Operations, it is stated that "since Water Board adoption of the 2008 Waiver, water quality within the watershed has shown some limited improvement". **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 there continues to be significantly elevated levels of sediment, pathogens and nutrients measured at sites which drain

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predominately agricultural lands in Walker Creek, Lagunitas Creek and Olema Creek, and that some sites in the receiving waters of Tomales Bay are heavily impacted by such runoff, suggest that **there needs to be continued implementation of Management Practices (MPs) on agricultural lands in the watershed over the long term to realize real water quality improvements.**

Non-point source pollution is, by nature, diffuse across the landscape and requires 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 MP's should be targeted where they will have the greatest impact, or where the pollutant loads are greatest. Effective implementation of such a program requires underlying water quality monitoring data to provide not only a baseline from which to evaluate improvements, but also as a tool to focus MP implementation.

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, the Water Board has recently reduced the frequency of pathogen TMDL monitoring and is not currently implementing watershed scale monitoring of sediment or nutrient parameters. 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.**


Furthermore, the CWC 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 maintains the most comprehensive water quality database available 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.**

Today, the Tomales Bay Watershed Council Foundation is the only organization conducting year-round monitoring of water quality at sites throughout the watershed for all existing water quality impairments. We hope to provide useful, long-term water quality data to support the continuation of increasingly effective partnership programs like this one, and urge you to strongly consider water quality data in your evaluation of future program requirements and implementation measures.

Sincerely,


Rob Carson, Water Quality Program Manager


Neysa King, Coordinator


Terry Sawyer, Director on the behalf of
Tomales Bay Watershed Council Foundation

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From: [Amy Trainer](#)
To: [Amy Trainer](#)
Cc: lyris@swrcb18.waterboards.ca.gov; Meillier.Laurent@Waterboards; Whyte.Dyan@Waterboards
Subject: Re: Inadequate Notice for Public Workshop on Oct. 3rd
Date: Monday, September 30, 2013 11:17:18 AM

Ms. Meillier,

Please excuse my typo, the first sentence was meant to say that the public notice is inadequate - not adequate - for the October 3rd workshop.

Thanks,
Amy

On Sep 30, 2013, at 11:15 AM, Amy Trainer wrote:

Dear Ms. Meillier,

I am writing to express agreement with Gordon Bennett, President of Save Our Seashore, that the **public notice is adequate for the October 3, 2013 public workshop** on the Tentative Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed.

As Mr. Bennett noted to you, the Board's notice to the public was via an e-mail sent at 6:14 pm on the Friday evening of 9/27, less than six days before October 3rd, the date of the only public workshop that is itself only 13 days from the public comment deadline of October 16th. **The Environmental Action Committee of West Marin finds this notice to be inadequate for a fair opportunity for the public to provide meaningful input on this important matter.**

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.

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

Thank you for your consideration of our concerns,
Amy

Amy Trainer

Executive Director

Environmental Action Committee of West Marin
P.O. Box 609 Point Reyes, CA 94956
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(415) 663- 9312 office
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Protecting West Marin for over 40 years!
www.eacmarin.org
www.savepointreyeswilderness.org

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From: gbatmuir@aol.com
To: [Meillier, Laurent@Waterboards](mailto:Meillier_Laurent@Waterboards); [Whyte, Dyan@Waterboards](mailto:Whyte_Dyan@Waterboards)
Subject: Proposal to Renew Tomales Bay Grazing Waiver
Date: Friday, September 13, 2013 5:59:48 PM

Page 1 of the Public Draft

at http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/tomalespathogens/Grazing_Waiver_091213.pdf
states (emphasis ours): *... "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 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**.

Page 1 of the Public Draft also states: *"112 property owners have submitted a Notice of Non-applicability whereas their herd size does not pose a threat to water quality."* Page 2 of the 2013 draft offers a definition of "eligibility" that excludes parcels under 50 acres, but there is no reference to herd size.

Is this Non-applicability based on "herd-size" actually intended to refer Non-applicability based on parcel-size (less than 50 acres)? If so, then the math based on page 1 seems unlikely.... of the 236 owners and 114,000 acres in the watershed, 99 owners and 67,000 acres are enrolled, leaving 137 owners and 47,000 acres not-enrolled, for an average of 343 acres per non-enrolled owner (i.e. much larger than 50 acres).

If Non-applicability is based on acres, then have any of the 112 assertions been checked against actual acres owned? If so, please **provide the data** on many were checked and the percentage whose assertions were checked that matched the actual ownership records.

If this "Non-Applicability" is based on herd size metric, then that would mean that many large ranches (and almost 40% of the watershed grazing area) are effectively hobby ranches without significant livestock. If so, has there been any ground-truthing (or review of Google Earth overheads) that would determine how many livestock are actually on the asserted "Non-Applicable" acres? If so, please **provide the data** on how many were checked and the percentage whose assertions were checked that matched the actual livestock counts? **Please provide the criteria** for "Non-Applicability."

Page 2 of the Public Draft 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."*

Thank you for this data that is necessary for members of the public to make informed comments on the Grazing Waiver Renewal Proposal. **You are welcome to consider this a Public Records Act Request if that formality is required.**

Sincerely,

Gordon Bennett, President, Save Our Seashore 415-663-1881

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From: gbatmuirb@aol.com

To: Meillier, Laurent@Waterboards; Whyte, Dyan@Waterboards

Subject: Re: Inadequate Notice for the October 3 Public Workshop on the Tentative Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay watershed

Date: Friday, September 27, 2013 10:43:46 PM

To: Lurnet Meillier, San Francisco Bay Regional Water Quality Control Board

RE: Inadequate Public Notice for the October 3, 2013 Public Workshop on the Tentative Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed

Dear Mr. Meillier:

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 Board's notice to the public was via an e-mail sent at 6:14 pm on the Friday evening of 9/27, less than six days before October 3rd, the date of the only public workshop that is itself only 13 days from the public comment deadline of October 16th.

While we appreciate the attempted outreach, the abbreviated public notice creates the perhaps inadvertent impression that this scheduling was designed to maximize opportunities for regulatory capture and minimize turnout by the general public.

This abbreviated scheduling thus magnifies our previously expressed concerns that the text of the proposed renewed Grazing Waiver appears to be vague, confusing and non-transparent regarding data from the prior Grazing Waiver.

If the Board can't properly notify the public about an informational workshop, then how can we Californians feel confident that the Board will properly inform us about data from the prior Grazing Waiver that the Board is using to justify the proposed renewal?

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.

Thank you for your consideration of our concerns,

Gordon Bennett, President, Save Our Seashore

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From: gbatmuirb@aol.com
To: Feger, Naomi@Waterboards
Cc: Whyte, Dyan@Waterboards; Ponton, James@Waterboards; Meillier, Laurent@Waterboards
Subject: Re: October 3rd public meeting
Date: Saturday, September 28, 2013 2:36:54 PM

Ms. Feger: Thank you for your prompt response. I understand the venue difficulties and appreciate the offer of an additional workshop in Oakland. The value of such an added workshop might be clearer after the October 3rd workshop, after a review of the requested data that you indicate will be provided early next week, and after the discussion that you propose.

I expect that some of the provided data may prompt more questions, so I appreciate the opportunity for what I hope is a face-to-face discussion that some of my environmental colleagues can also participate in. Because the public workshop in Marshall is most likely to draw agriculturists, while an additional Oakland workshop is more likely to draw the same environmentalists that would attend the suggested discussion, such a discussion may moot the perceived need for an additional Oakland public workshop.

I also expect that the monitoring data that you will provide will be complex and require us to do some level of statistical analysis on a sub-watershed basis in order to independently confirm your conclusions and/or draw our own. This will take time to arrange and execute, so my concern remains that a comment deadline of October 16th is far too short for this complex and important issue.

Such a short deadline facilitates easy comments by agriculturists who may profit from a continuation of what I regard (pending the requested information) as a permissive and ineffective status quo. But by that, I do not mean to suggest in advance that the Board needs to or should go from a primarily voluntary program to an absolutely mandatory program.

Instead, I suggest that there is very likely considerable room between these two extremes for more ground-truthing that would encourage a higher level of voluntary compliance and hopefully a quicker pace of watershed improvement. In my opinion, it is the precise level of ground-truthing that is at issue here.

The current deadline of October 16th makes informed comment difficult for public interest groups who need to analyze the provided information in the hope of encouraging more ground-truthing than the current proposal appears to offer. Consequently, I suggest that a mid November deadline for public comments seems far more appropriate and would seemingly inconvenience no one on any side of this complex and important issue.

Gordon Bennett, President, Save Our Seashore

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Save Our Seashore
40 Sunnyside Dr. Inverness CA 9497
gbatmuirb@aol.com 415-663-1881

October 2, 2013

To RWQCB - Region 2

Regarding the letter and data you sent today in response to our questions regarding the proposed extension of the Tomales Bay Grazing Waiver.

Thank you, but four points immediately arise from our quick analysis this afternoon:

1. 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 Tentative Order'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. For example, WS-10 (which shows a post-Waiver increase in Geomean Exceedances from 43% to 50%) covers the 100+ sq. mile Lagunitas Watershed. In contrast, WS-14 (which shows a post-Waiver decrease in Geomean Exceedances from 29% to 0%) covers only a tiny tributary to Olema Creek.

Thus, from the perspective of pathogens delivered to Tomales Bay, the WS-10's increase from 43% to 50% could far outweigh WS-14's decrease from 29% to 0% (seemingly this might be at least visually addressed by making the width of the WS bars in the REC-1 Table proportionate to the size of the watershed).

2. The Report also includes data from watersheds that are mostly or wholly in public hands, which makes ground-truthing easy and cooperation likely. Thus it seems inappropriate to include these watersheds 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.

The Report also includes watersheds (e.g. WS-1, WS-2, and WS-3) that are primarily in residential use, rather than in grazing. Exceedance trends from residential watersheds would similarly appear to be irrelevant to gauging the effectiveness of a Grazing Waiver.

3. The Excel data is divided into "wet" and "dry" seasons, which recognizes the obvious importance of rainfall to the data, but provides only this crude distinction. Based on MMWD data, post-Waiver average-year rainfall was lighter than the pre-Waiver average-year rainfall, thus the apparent post-Waiver "limited improvement" could be partly or mostly attributable to simply less rain during the Waiver period rather than to any operational effectiveness of the Waiver.

Of course, analyses divided into heavier vs. lighter rainfall averages are just as crude as analyses divided into wet vs. dry seasons. 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.

4. Lastly, the Report Card also provides a graph of post- vs. pre-Waiver geomeans 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. This data comes from the below Table from the June 2011 Triennial Report from the Department of Public Health (this is all the data we have, but there may be additional data available)

Table 1. Summary of rainfall closures for the certified shellfish growing areas in Tomales Bay from July 2005 through June 2011.

Growing Area	Days Closed (July 2010-June 2011) Total Rainfall 47.0"	Days Closed (July 2009-June 2010) Total Rainfall 41.2"	Days Closed (July 2008-June 2009) Total Rainfall 27.6"	Days Closed (July 2007-June 2008) Total Rainfall 31.2"	Days Closed (July 2006-June 2007) Total Rainfall 27.3"	Days Closed (July 2005-June 2006) Total Rainfall 55.5"
A	130	111	57	81	75	116
B	123	96	48	68	61	100
C	135	121	55	77	70	106
D	153	145	68	93	94	125

Attachment two of this email is an Excel spreadsheet showing a basic linear (R2) regression analyses of these figures. Each of the four sampling stations show a six-year upward trend for closures, despite the first 3 years being pre-Waiver and the last 3 being post Waiver and the trend line for rainfall being flat. This would appear to contradict the conclusions you draw from your data.

Save Our Seashore is not suggesting that our (or your) simplistic analyses should be considered definitive. Simplistic linear regressions cannot capture or reasonably reveal the complexity of multiple causations present in the real-life word (although the Akaike-weights-and-model-averaging method of multivariate statistical analyses can begin to unravel this knot). Such sophisticated analyses are not only beyond the scope of this afternoon’s response (although we hope to have a professional engaged next week to do more thorough analysis). However, such analysis also requires additional key data such as immediate rainfall measures to complement the sparse data available in your Report Card and its Excel spreadsheet. We hope that such additional data is immediately available to our consultant in digital form.

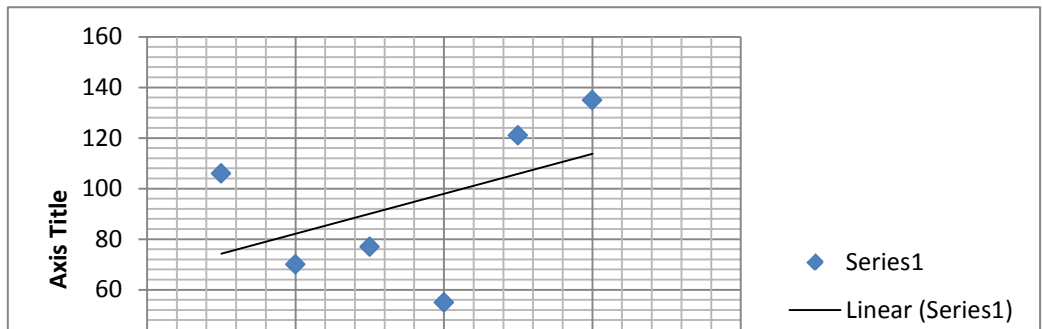
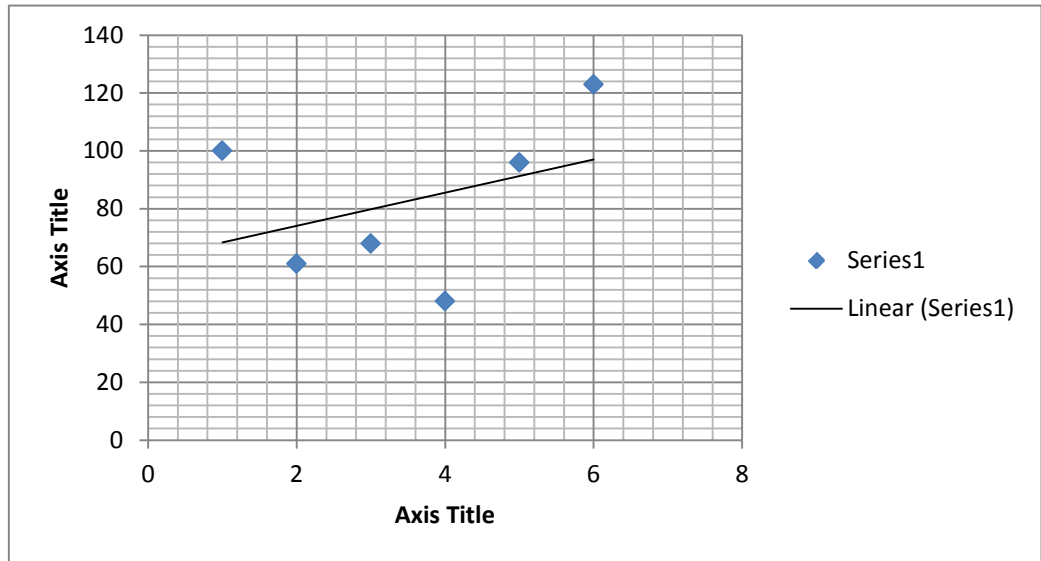
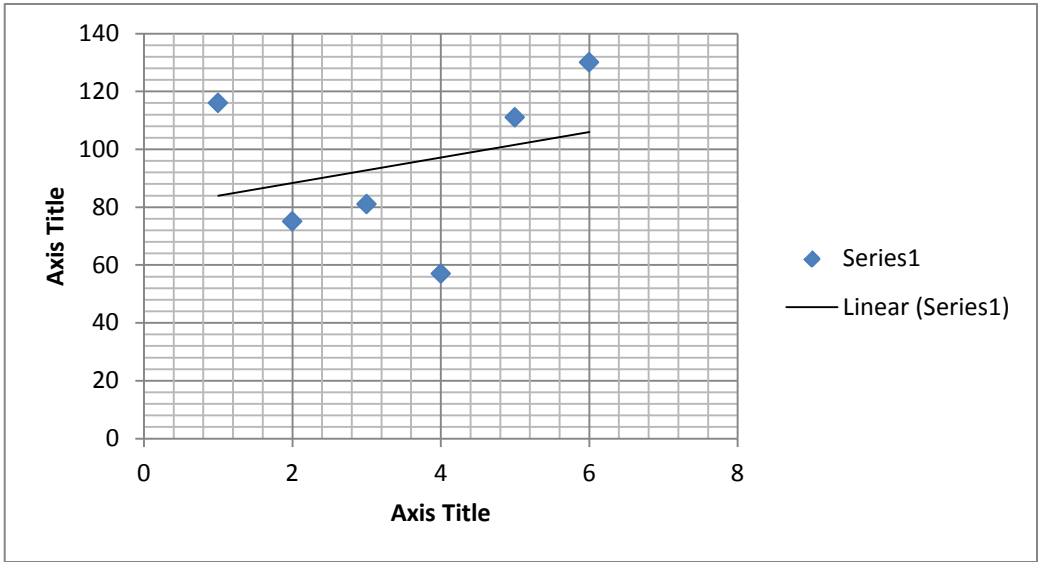
In summary, we have lost too many estuaries to over-development that pushes the shellfish industry, by default, to lobby for access other estuaries that are supposed to be protected from any development. The Regional Board has the responsibility not only to improve the existing shellfish-industry-dependent estuaries to enhance their long-term multi-use sustainability, but the Board must also put a dead stop to the slash-and-burn mentality that assumes that there will always be a “next estuary” to use.

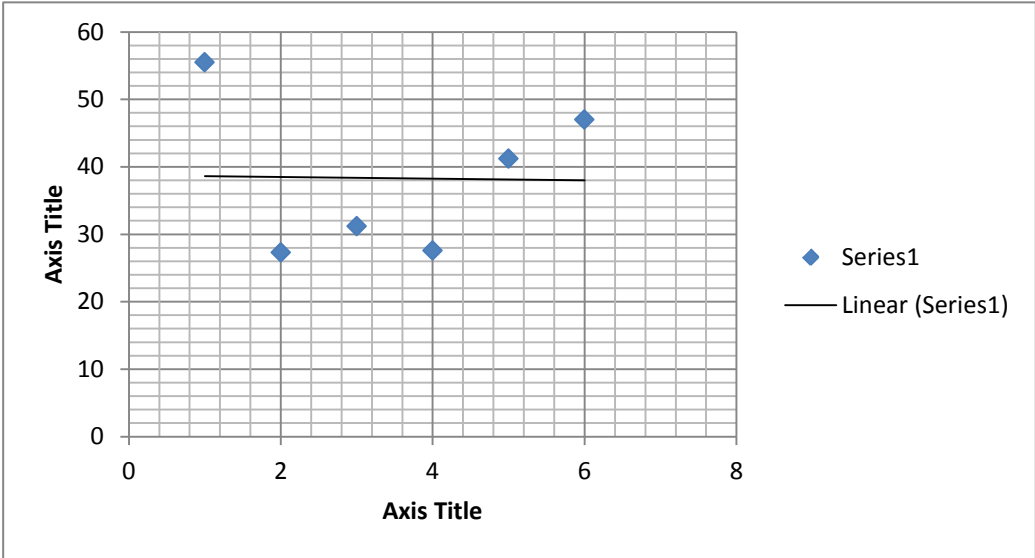
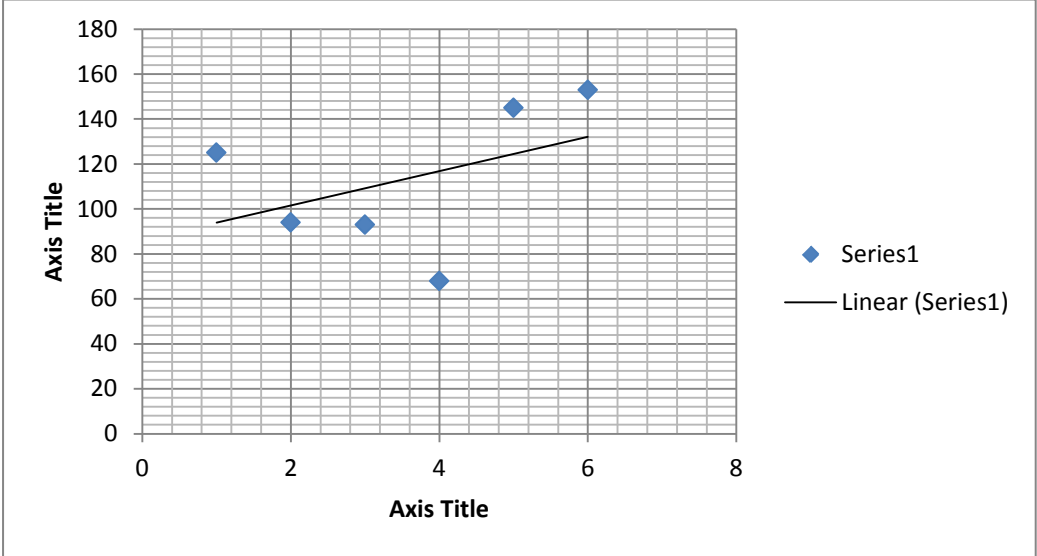
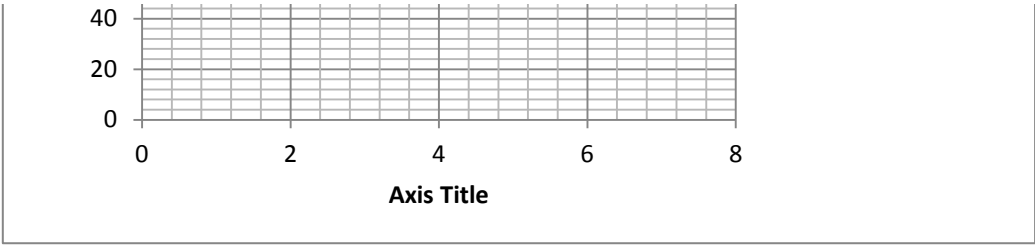
We appreciate your willingness to dialogue on these important “data-driven” issues.

Sincerely,

Gordon Bennett, President, Save our Seashore

Growing Area	05-06	06-07	07-08	08-09	09-10	10-11
A	116	75	81	57	111	130
B	100	61	68	48	96	123
C	106	70	77	55	121	135
D	125	94	93	68	145	153
Rainfall	55.5	27.3	31.2	27.6	41.2	47





From: gbatmuirb@aol.com
To: Ponton_James@Waterboards; Meillier_Laurent@Waterboards; Whyte_Dyan@Waterboards
Cc: amy@sacmarin.org
Subject: Fwd: RDM's in Tomales Bay
Date: Tuesday, October 08, 2013 5:35:00 PM

FYI below...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 managers," some of whom in Marin have put ag politics ahead of hard science.

Gordon Bennett, President, Save our Seashore

-----Original Message-----

From: James W. BARTOLOME <jwbart@berkeley.edu>
To: gbatmuirb <gbatmuirb@aol.com>
Sent: Sat, Oct 5, 2013 12:18 pm
Subject: Re: RDM's in Tomales Bay

Mr. Bennett

I have a couple of comments on your questions.

- 1) The tables in pub 8092 do list minimum levels of RDM for the objectives of sustained forage production and soil protection for three different rainfall zones.
- 2) The categories of light, moderate, and heavy grazing are more subjective and do not directly correspond to RDM levels. "Moderate" grazing is frequently recommended, but that is for different objectives that would include economic considerations and other resource values. Keith Guenther of Wildland Solutions does have several publications illustrating RDM levels corresponding to different levels of grazing use.
- 3) The tables in pub 8092 cover a wide range of locations and are based on both research and successful application by experienced range managers. When I use RDM for management or planning I base my recommendations on the published tables but then modify the amounts based on many factors such as the local environment and specific goals for grazing. This is also the case for local land management agencies. On sites in Tomales Bay watersheds MALT has recommended RDM levels higher (typically in the vicinity of 1000 lbs/acre) than those in the published guidelines. Publication 8092 does state that guidelines should be developed based on the specific site of application. This should be done by an experienced range manager.
- 4) **I do not recommend you try to determine or use a specific RDM amount corresponding to moderate use. RDM is best used by an experienced range professional as a guide to monitoring the degree of livestock use in a given year; supported by a plan with a clear set of goals and additional grazing management specifications.**

I hope this helps.

On Fri, Oct 4, 2013 at 5:20 PM, <gbatmuirb@aol.com> wrote:

Professor Bartolome: The Regional Water Quality Control Board for its Grazing Waiver Proposal for the Tomales Bay Watershed
http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/tomalespathogens/Grazing_Waiver_091213.pdf
has included as a reference for its required RDM reporting your paper: Guidelines for Residual dry Matter on Coastal and Foothill Ranges lands in California (Publication #8092).

Your paper describes the San Joaquin Experimental Range, whose annual rainfall averages 19 inches per year and would therefore be considered as [art of your classification: "*annual grassland/hardwood rangeland...average rainfall between 12 and 40 inches.*"] Your Figures 1-3 provide three reference photographs of SJER for light, moderate and heavy grazing respectively, with a note that the "moderate" grazing level was recommended.

In the Tomales Bay watershed, rainfall ranges from 26 inches per year in the north to 39 inches per year in the south, so the entire watershed appears to fall within your "*annual grassland/hardwood rangeland*" classification and thus your three SJER photographs should be useful tools for Tomales Bay agriculturalists.

However, some of those agriculturists weigh for RDM, rather than using reference photographs, but your paper's Table 2 (for "*annual grassland hardwood rangelands*") shows only one set of reference weights, for "Minimum" RDM standards, which I presume means what Figure 3 describes as "Low" RDM values from heavy grazing.

If so, then could you point me to a reference that could provide similar Tables (for varying coverages and slopes), but for "Moderate" RDM standards (from "moderate" grazing) and High RDM standards (from light grazing)...both for your "*annual grassland/hardwood rangeland*" classification?

Thank You, Gordon Bennett, President, Save Our Seashore 415-663-1881

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From: [Nancy Scolari](#)
To: [Meillier, Laurent@Waterboards](mailto:Meillier.Laurent@Waterboards)
Cc: "[Justin Oldfield](#)"; "[David Lewis](#)"
Subject: Marin RCD Comments
Date: Wednesday, October 16, 2013 4:57:44 PM
Attachments: [Marin RCD Comments.pdf](#)

Thank you for the opportunity to comment.

Nancy Scolari
Marin Resource Conservation District
P.O. Box 1146
Point Reyes Station, CA 94956
www.marinrcd.org
415.663.1170



October 16, 2014

Mr. Laurent Meillier
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

RE: Public Review Draft - Tomales Bay Watershed Conditional Waiver of WDRs for Grazing Operations

Dear Mr. Meillier:

The Marin Resource Conservation District has reviewed the San Francisco Regional Water Quality Control Board's *Renewal of Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed* and offers the following comments:

Section 1, Background and Grazing Waiver Strategy,

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 (RCD example is provided below). Ranchers, east shore homeowners and others have made significant improvements which should be acknowledged. This information would provide a better context of ranchers' efforts amidst other "dischargers" working toward compliance of the TMDL. In addition, the Tomales Bay Pathogen TMDL Report Card, presented at the public workshop, provided water quality trends and showed improvement being made pre and post TMDL which should be stated in this section.

Page 1, Paragraph 3

To date, 99 property owners have submitted a Notice of Intent (hereinafter referred to as the NOI) for their grazing parcels to comply with the 2008 Waiver. The total acreage representing the properties operating under a NOI was approximately 67,000 acres. To date, 112 property owners have submitted a Notice of Non-applicability whereas their herd size does not pose a threat to water quality. In accordance with requirements of the 2008 Waiver, 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. 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. Enrollees evaluated the effectiveness of these practices in controlling fecal coliform and sediment non-point source pollution from grazing activities.

Page 2, Paragraph 5

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).

Section 3, Definition of Terms

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.

Page 2

a) 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.

Conditions

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.

Page 19, Section 6) Compliance Monitoring and Reporting

f) 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). These measurements shall be included in the Annual Certification of Compliance document. If minimum RDM targets are not met, the Discharger shall provide an explanation in the Annual Certification of Compliance document.

Thank you and the RWQCB staff for supporting us in our efforts to comply with the Tomales Bay Pathogen TMDL. Significant progress has been made to date and the ranching community remains committed to the implementation of Management Practices. We look forward to continuing to work with you on the Conditional Grazing Waiver. Please feel free to contact us if you have any questions or would like to discuss our comments.

Sincerely,



Nancy Scolari
Executive Director

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From: [Justin Oldfield](#)
To: [Meillier, Laurent@Waterboards](mailto:Meillier.Laurent@Waterboards)
Cc: [Nancy Scolari](#); djillewis@ucanr.edu; jxbar.norman@yahoo.com; slcdiverse@yahoo.com
Subject: CCA Comments on Tomales Bay Grazing Waiver
Date: Wednesday, October 16, 2013 4:22:11 PM
Attachments: [CCA Comments on Proposed Renewal of Tomales Bay Grazing Waiver 10-16-2013.pdf](#)

Ms. Meillier,

Please see the attached comments from the California Cattlemen's Association on the Tomales Bay Grazing Waiver. Please contact me directly with any questions or concerns.

Sincerely,

Justin Oldfield
Vice President, Government Relations
California Cattlemen's Association
Office - (916) 444-0845
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October 16, 2013

Ms. Laurent Meillier
San Francisco Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: Renewal of Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed

Dear Ms. Meillier,

The California Cattlemen's Association (CCA) appreciates the opportunity to comment on the proposed renewal of the Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed (waiver) proposed by the San Francisco Bay Regional Water Quality Control Board (Regional Board). CCA is a statewide trade association that represents ranchers and beef producers throughout California including many of those subject to this proposed waiver.

First and foremost, CCA would like to highlight the positive environment benefits ranchers provide for the health of California's rangelands, wildlife, open space and the public at large. Without ranching, many acres of rangeland that provide abundant habitat for common, threatened and endangered species would no longer be available. In addition, California's working rangelands serve as the basis for our watersheds that provide water for multiple beneficial uses including municipal, agricultural, fishery and recreational purposes.

CCA appreciates the Regional Board's efforts in working with the University of California Cooperative Extension (UCCE) to draft a regulatory mechanism that most appropriately reflects actual management tools designed by extension agents to document and improve rangeland health. The use of the Rangeland Water Quality Management Plan developed by UCCE staff is an excellent template to build a flexible program that will focus the actions of ranchers to improve water quality by actually addressing known or potential pathways for impairment.

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.

1. Persons Eligible for Coverage

The draft waiver states that of 236 property owners eligible for coverage under the draft waiver only 99 have filed a Notice of Intent to seek coverage. It also states that 112 property owners

TIM KOOPMANN
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DAVE DALEY
SECOND VICE PRESIDENT
CHICO

BILLY FLOURNOY
FIRST VICE PRESIDENT
ALTURAS

PAUL CAMERON
FEEDER COUNCIL CHAIR
BRAWLEY

LAWRENCE DWIGHT
SECOND VICE PRESIDENT
MCKINLEYVILLE

BILL BRANDENBERG
FEEDER COUNCIL VICECHAIR
EL CENTRO

have submitted a Notice of Non-applicability "...whereas their herd size does not pose a threat to water quality." Conditions established under the current waiver mandates only those landowners with greater than 50 acres in one parcel that have active livestock grazing for more than 45 days in a 12 month period are subject to comply with the waiver.

While CCA admits that some agricultural activities may be associated with non-point source discharges, it is incorrect to assume that the presence of grazing within a watershed is a routine cause of nutrient, pathogen or sediment water quality impairment. CCA understands that your staff has developed objective conditions to determine what property owners are eligible for waiver coverage as described under the definition of terms of a Grazing Operation or Grazing Lands. However, the California Water Code does not provide your staff the authority to assume that all ranchers grazing rangelands in the Tomales Bay watershed meeting the conditions of the waiver discharge waste. California Water Code Section §13260 requires an individual to seek a waste discharge permit for discharging or proposing to discharge waste. As such, the draft waiver presumes that all ranchers within the Tomales Bay watershed with rangelands meeting the eligibility criteria must seek compliance.

The waiver provides an appropriate compliance mechanism for those who discharge or propose to discharge waste. New language should be developed to clarify that only those who discharge or propose to discharge waste that may affect water quality are required to seek coverage. Furthermore, statements reflecting that herd size on its own substantiates whether a grazing operation is a threat to water quality is also fallacious and should be revised immediately.

2. Assessment & Annual Reporting of Residual Dry Matter

The proposed waiver includes a new condition for compliance that is significantly problematic. Residual Dry Matter (RDM) must now be reported on an annual basis in order to comply with the proposed waiver. The waiver cites *California Guidelines for Residual Dry Matter Management on Coastal and Foothill Annual Rangelands* as the reason for including this requirement as a condition for compliance. While Bartolome et. al (2002) state that "...properly managed RDM can be expected to provide a high degree of protection from soil erosion and nutrient losses", the RDM tool was never developed as a standalone monitoring tool to assess water quality impairment. Rather, RDM is a useful tool to assess the impact of stocking densities on available forage and achieve management objectives using different grazing regimes.

In some cases, moderate to heavy grazing may be the management objective to provide a substantial reduction in fuel loads, graze riparian areas for short periods, improve wildlife habitat for certain species, cause ground impaction to loosen soil and promote the growth of native grasses or manage invasive and noxious weeds. In this example, subsequent monitoring may reveal minimal RDM however this was the objective sought in order to meet the management goals of the rancher. The proposed waiver incorrectly assumes that rangeland with minimal RDM is poorly managed. In practice, RDM is used as a metric and baseline measurement tool and should not be substituted to exclusively represent "healthy" or "unhealthy" rangeland.

CCA agrees that measuring RDM is an important and beneficial tool to measure and achieve certain rangeland health objectives however other types of monitoring are more properly suited

to determine if management practices are effective and properly employed. The proper use of management practices is the basis for correcting known areas of water quality impairment and avoiding future discharges that affect water quality. The use of photo monitoring protocols already developed by UCCE extension agents would fit more properly with the proposed waiver in place of any requirement to measure water quality or RDM. In effort to encourage compliance for those who discharge or propose to discharge by keeping compliance costs to a minimum, photo monitoring is proven to be an effective monitoring tool that is simple, inexpensive, rapidly conducted and is documented to surpass other forms of monitoring (Frost et. al 2003). McDougald et. al (2003) also states that photo monitoring can provide a useful long term assessment of changes in landscape.

Photo monitoring protocols have also been developed to specifically measure discharges of sediment (Lewis et. al). Specifically, UCCE extension agents developed a Sediment Delivery Inventory and Monitoring Worksheet that provide an easy to use resource for ranchers to document areas of potential sedimentation and apply correct management practices, if deemed necessary, to prevent further discharges. The worksheet provides the user with various tools including prioritization, planning and documenting the implementation of control measures and has been proven to be used successfully by farmers and ranchers (Lewis et. al).

CCA strongly urges your staff 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.

3. Pathogen Contributions

Reference “C” of Table 2 states “Open space lands and the Bay contain wildlife and are therefore recognized as potential source areas. These areas are not believed to be a significant source of pathogens and their contribution is considered natural background; therefore, no management measures are required.” CCA strongly disagrees with this premise that wildlife in the Tomales Bay watershed are minimal sources of pathogen and nutrient impairments. Furthermore, CCA is discouraged that the Regional Board continues to take no action to address water quality impairments from wildlife as part of the overall strategy to achieve the objectives of the Tomales Bay Total Maximum Daily Loads (TMDL).

Research clearly demonstrates that wildlife have the ability to affect water quality. For example, wild pigs are known sources to shed pathogens and are common to many coastal regions. Due to their tendency to inhabit riparian areas, wild pigs serve as a likely source of water quality impairment (Atwill et. al 1997). Ground squirrels are also proven to be carriers and shedders of pathogens, most notably cryptosporidium, and may actually serve as the source of infection for beef calves (Atwill et. al 2004). While cattle shed more fecal material per animal unit, ground squirrels are more concentrated on rangelands and in some areas may shed feces with greater concentrations of pathogen infection.

CCA recognizes that control measures for wildlife may be difficult to manage or enforce, however the contribution of pathogens and nutrients from wildlife should not be discounted as simply “background sources.” Discounting the water quality threat posed by wildlife places

additional burden and liability on ranchers to not only control potential discharges from grazing livestock but also mitigate for discharges associated with wildlife that may inhabit their land. Currently, the Regional Board is not determining the host of pathogen impairments from water quality samples taken from routine monitoring locations and has no way to determine if impairments are due to livestock or wildlife. As such, the 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.

4. Waiver Conditions

CCA applauds the regional board for enabling ranchers to securely and confidentially retain their Ranch Water Q (Bartolome, William, Neil, & Connor, 2002) quality Plans on-farm. That said, onsite inspections conducted by Regional Board staff must be coordinated in advance with property owners to ensure proper approval for access given is given. The draft waiver stipulates that an enrollee "...shall allow Water Board staff entry onto the affected property for the purposes of observing, inspecting, photographing, videotaping, measuring and/or collecting samples or other monitoring information to document compliance or non-compliance with this Order." The draft waiver states that non-compliance with this order shall be grounds for terminating who is eligible for waiver coverage.

Although the draft waiver refers to the authority granted to Regional Board staff to request an investigation of a discharge or suspected discharge under California Water Code Section §13267, it 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. Section §13267 specifically states that an inspection "...shall be made with the consent of the owner or possessor of the facility or, if the consent is withheld, with 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 and no condition in the proposed waiver circumvents due process.

In addition, it should be made clear that before any demand is made by Regional Board staff to inspect private property a proper 13267 letter shall be prepared and delivered to the landowner as prescribed by law. A 13267 must not just be a notification that an inspection will occur but under law must also establish the need for the inspection and any associated costs. Section §13267 states that, "The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and benefits to be obtained from the reports." 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. All too many times 13267 letters do not provide facts or present a case with regards to a suspected discharge however this must be done according to law.

5. Conclusion

CCA again appreciates the opportunity to comment on the draft waiver and we strongly urge the Regional Board to delay any action to adopt a waiver until the issues outlined in our letter have

been meaningfully addressed. More importantly, we urge the Regional Board to work with local ranchers to ensure their comments, concerns and questions are addressed prior to any motion for approval is brought before the Regional Board. If you have any questions, please do not hesitate to contact me directly.

Sincerely,



Justin Oldfield
Vice President, Government Relations

CC: Dr. David Lewis, University of California Cooperative Extension
Ms. Nancy Scolari, Marin Resource Conservation District
Mr. Sam Dolcini, Marin County Farm Bureau
Mr. Jerry Norman, Sonoma – Marin Cattlemen’s Association

Works Cited

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- McDougald, N., Frost, B., & Dudley, D. (2003). Photo-Monitoring for Better Land Use Planning and Assessment. *Univeristy of California Agriculture and Natural Resources, Rangeland Monitoring Series*, Publication 8067.

From: [Scheuring Chris](#)
To: [Meillier, Laurent@Waterboards](mailto:Meillier.Laurent@Waterboards)
Cc: ["Sam Dolcini"](#); [McDonough Nancy](#); [Chasteen Dianne K.](#); [Fisher Kari](#)
Subject: Renewal of Conditional Waiver - Grazing in Tomales Bay Watershed
Date: Wednesday, October 16, 2013 4:15:26 PM
Attachments: [WUD comments11.40412.doc](#)
[grazing waiver comments.doc](#)
[Farm Bureau's arguments against the TMDL requirements11.doc](#)

Dear Mr. Meillier:

Please accept these comments on the Renewal of Conditional Waiver of Waste Discharge Requirements for Grazing Operations in the Tomales Bay Watershed ("the Grazing Waiver"), on behalf of the Marin County Farm Bureau ("MCFB"). As counsel to MCFB, I am in the unfortunate position of having received late notice of today's comment deadline, so I hope you will forgive the roughness of these comments and extend MCFB the courtesy of a later submission. We understand that the Regional Board will hold a hearing on November 13, 2013, in all events, and we hope to have a representative appear in person at that hearing.

It appears that the Board is considering renewal of the 2008 waiver, without much change except for the addition of a requirement to monitor and report on residual dry matter. 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.

Farm Bureau renews these concerns during the current waiver process. 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.

I attach, for your reference, some materials from the process leading up to the 2008 waiver. My apologies for an inability to conduct a finer synthesis of these concerns, renewed here, at this late moment. However, we hope to provide you with additional information prior to or at the public hearing on November 13.

Thank you for your consideration of the foregoing.

Chris Scheuring
Legal Services Division
California Farm Bureau Federation
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April 12, 2004

Farhad Ghodrati
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Subject: Pathogens in Tomales Bay, Total Maximum Daily Load Final Project Report

Dear Mr. Ghodrati:

Western United Dairymen is an association of dairy farm families throughout California. We have over 1,100 members, from San Diego County in the south to Del Norte County in the north. Our members produce approximately 65% of the milk produced in the state. Ten of the twelve remaining Tomales Bay watershed dairy families are members of our association.

Western United Dairymen has reviewed *Pathogens in Tomales Bay, Total Maximum Daily Load Final Project Report*. We are pleased with the recognition the report has afforded to the on-going conservation efforts currently being practiced by the dairy farms of the Tomales Bay watershed. We believe that considerable advances have been made in recent years as our members have voluntarily implemented conservation management practices. The dairy industry has been willing to initiate innovative management activities and has been supportive of the efforts of the Regional Board in Tomales Bay. Certain farms have gone even farther; they have accomplished disinterested third-party evaluation of their on-farm environmental stewardship and have achieved certification in the prestigious California Dairy Quality Assurance Program (CDQAP). It is gratifying to see their efforts recognized and appreciated.

We strongly urge an expanded role for CDQAP as a means of verification of compliance. Certification in CDQAP is for limited term. A dairy that does not maintain its facility infrastructure and the appropriate management plans to accomplish continuing compliance with all federal, state, and local regulations, including those related to a TMDL and a basin plan, may be decertified. Decertification may also occur if a facility violates regulatory requirements or has illegal discharges. The program requires renewal of certification on a regular schedule to provide ongoing assurance of compliance. The Tomales Bay report emphasizes the need to demonstrate implementation. Certification in CDQAP 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.

Additionally, the Farm Bureaus of Sonoma and Marin counties host the Sonoma-Marin Animal Resource Management Committee. Staff members of the San Francisco Bay Regional Water Quality Control Board regularly participate on the committee. The Animal Resource Management Committee (ARM) provides a unique opportunity for the enhancement of collaborative interactions with the dairy industry. We believe that this venue, 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.

Western United Dairymen is well aware of the difficulties encountered in monitoring for specific pathogens in water, and we recognize the need to use indicator organisms in place of direct monitoring. We are most concerned, however, that true baseline conditions are not well understood, and that the beneficial uses of bay waters may not be pragmatically identified. The water quality objectives of fishable and swimmable waters are certainly laudable, but we must question, particularly in the case of significant storm events, whether such objectives are truly realistic in the natural and historical order of things throughout the Tomales Bay watershed.

Obviously, historical data are difficult, if not impossible, to obtain. However, we urge that increased priority be given to 1) development of modeling technology to better understand the dynamics of bay water hydraulics; 2) track the changes in uses of the bay, including land uses in areas near the bay; 3) determine if such changes in the uses of the bay are appropriate; 4) assess the validity of the stated objectives and standards; and 5) make a comparative analysis of the realistic potential to attain the objectives, especially in wintertime storm events.

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.

Western United Dairymen is somewhat disturbed by what we note as occasional editorializing in the text of the report. By way of example, a particular case in point can be found on page 38 of the report. It sounds as if the writer of this section experienced some degree of frustration in attempting to get an accurate number of livestock in the watershed. It is not appropriate to make the statement that "it is possible that the remaining dairies ... hold a greater number of animals than in the past." This statement might easily lead a reader to make inaccurate assumptions about the dairy farms of Tomales Bay. While technically correct that it is "possible", the obvious editorial implication is that substantially more cattle are located on Tomales Bay

dairies than in the past. Text of this nature is misleading, and should be avoided in a technical report.

The number of animals on each dairy is known to the enforcement team of the Regional Board, and should be relatively easy to secure. It should be understood that the dairies in the Tomales Bay area have limited opportunities to consolidate into larger herds. We are aware of some 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.

Additionally, the information used in Table 13 is based on data gathered by University of California Extension in 1990. It does not accurately reflect the current population of either farms or cows. By our count, 15 dairies have ceased to operate in the Tomales Bay watershed since 1990. Many of these farms have been retired into rural estate land uses, and others have been converted to grazing lands. The attrition in the Marin dairy industry over the last 14 years is not accurately reflected in the statistics of Table 13. Data published by the Dairy Marketing Branch of the California Department of Food and Agriculture (CDFA) show Marin County as a whole, not just the Tomales Bay watershed, with 29 active dairy herds in 2001, 2002 and 2003. They show 9,762 mature cows in 2001, 9,583 in 2002, and 10,145 in 2003. The average Marin dairy herd size was 337 in 2001, 330 in 2002, and 350 in 2003.

This data set reflects normal annual variations expected in the average dairy. Herd sizes have tended to remain relatively static throughout Marin County. It should also be noted that 4 of the 12 dairies in the watershed are upstream of two large water impoundments, Soule Joulé Reservoir and Nicasio Reservoir. It is most unlikely that they have any influence in Tomales Bay, further discounting Table 13. We recognize the following calculations are useful only for purposes of comparison; however, if we were to apply the 2003 average herd size to the other 8 dairies in the watershed it would give us 2,800 mature cows. Adding an equal number of animals for replacement stock (a reasonable norm for the area) makes a total of 5,600 dairy cows and heifers. This number is far more realistic than the Table 13 estimate of 10,970.¹

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.

However, we have serious reservations as to the true utility of Tables 13 and 14. The question of how many animals are on our dairy farms and a calculation of how much manure they produce is not germane to pathogen loading of Tomales Bay. Including

¹ The CDFA information is available on the web at:
<http://dairy.ca.gov/pdf/Annual/2003/stats2003annual.pdf>.

these tables, with their incumbent inaccuracies, seems solely inflammatory and does nothing to describe the magnitude of the problem. The important fact related to dairy farms is how effectively they are able to capture, contain, store, and utilize the manure in an agronomically responsible manner, and this is not at all a function of the volume produced. We note that you have prepared an inventory counting the parcels with septic systems, but you have not found it necessary to document the number of people those systems serve, or to provide an estimate of the gallons of septic system effluent the soils surrounding Tomales Bay must absorb and hold. It would seem appropriate to apply consistent reasoning to the inventory of the dairy industry, especially in light of the minimal data correlating in any direct way the fecal indicators in the bay to dairy cow numbers or areal density.

We suggest a listing of the number of dairy farms, including acknowledgement that following recent inspections by regional board staff, 11 have been verified to be in compliance with Title 27, and one has been issued Waste Discharge Requirements to schedule accomplishing compliance. It would be appropriate to include a note that four have been certified by CDQAP. This would be a more just and open-minded way to describe the dairy industry. We suggest that Tables 13 and 14 serve little use and request they be eliminated.

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.

Based upon on-site inspections performed by regional board staff, the dairies in the Tomales Bay watershed have achieved compliance with the regulatory requirements of Title 27 of the California Water Code. However, much of the information in the report is based on assumptions, and assumptions are not an adequate or fair basis on which to base requirements that will certainly result in financial and physical constraints on our members. 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. We suggest that efforts to maintain conservation-based changes that have been accomplished to date should be the primary focus directed toward those producers who have been supportive and cooperative in the initial stages of the effort to reduce indicator organisms in Tomales Bay. The Sonoma-Marín Animal Resource Management Committee and the California Dairy Quality Assurance Program will be valuable assets to maintain current efforts.

Farhad Ghodrati
April 12, 2004
Page 5 of 5

Western United Dairymen recognizes the difficult task the regional board is facing. We assure you that our dairy families are committed to performing responsible farm management practices and environmental stewardship. We appreciate the recognition you have given to the efforts of our members to date. Tomales Bay dairy families can be expected to do their part to reduce their share of pathogen loading to Tomales Bay. Incumbent to this already demonstrated commitment is our need for the Regional Board to: 1) avoid editorializing; 2) obtain more Tomales Bay site-specific and current data; and 3) consider whether the water quality standards and objectives utilized in the report are temporally and spatially appropriate for the bay, or given the natural factors of the watershed, even attainable during storms.

Thank you for the opportunity to share our observations with you. We remain available for further consultation at your convenience.

Very truly yours,

Original signed & mailed

Michael L. H. Marsh, CPA
Chief Executive Officer

cc: Sharon Doughty
Robert Giacomini
David Lewis
Sonoma-Marin Animal Resource Management Committee

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MARIN COUNTY FARM BUREAU

P.O. Box 219, Pt. Reyes, CA 94956

June 18, 2008

To: California Regional Water Quality Control Board
Re: Tomales Bay Watershed Grazing Waiver

Marin County Farm Bureau would like to make a few comments regarding the Tomales Bay Watershed Grazing Waiver. I would like to start by saying thank you for having worked with Western United Dairyman and the University of California Cooperative Extension office by listening to their valuable input on this matter. Ranchers in the watershed and surrounding Marin and Sonoma County areas have historically been excellent stewards of the land and I hope you recognize all of their hard work as this process moves forward.

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 sense 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.

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. 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.

Third, with regards to Mercury in the Walker Creek watershed, you state "To avoid the inadvertent discharge of mercury, grazing lands' landowners and lessees in the Walker Creek watershed downstream of the Gambonini Mine must incorporate management practices that minimize the discharge of mercury or the production of methylmercury."

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.

Once again, thank you for taking our comments and I hope to work more with you on this in the future.

Regards,

Dominic Grossi
President,
Marin County Farm Bureau

Farm Bureau's arguments against TMDL requirements – 8/08

The Regional Board established TMDL requirements for grazing operations without ever doing a proper study using current technology available to determine the relative contributions of wildlife and of grazing operations to the coliform contamination in Tomales Bay. In addition, the Regional Board's TMDL requirements for grazing operations are below the level of coliform contributed by wildlife in a water-board-sponsored study of Tomales Bay completed in 1996.

The TMDL of 200 MPN, adopted by the Regional Board on September 21, 2005, was an arbitrarily chosen number. On March 4, 2005, the Regional Board had first recommended a tributary TMDL of 43 MPN, and after much public criticism, it arbitrarily raised the number to 200 in September 2005. But the Regional Board had reason to know this number is lower than the contribution made by wildlife alone, and therefore should be unachievable by grazing operations. In 1995-1996, the Tomales Bay Shellfish Technical Advisory Committee (TBSTAC) carried out a study of Tomales Bay coliform levels, sponsored by the regional water board and DHS. In that study, published in 2000, White Gulch was used as a "control for freshwater inputs, where any fecal contamination should be low and restricted to wildlife sources," according to language in the study. Table 17 in the TBSTAC study shows that 4 out of 14 samples collected at the White Gulch wildlife control site had fecal coliform levels of 700, 230, 490 and 230 MPN respectively. The Regional Board is imposing a TMDL requirement on grazing operations that is lower than the wildlife control from the 1995-96 study.

However, the 1995-96 study was done with technology that is outdated, and cannot distinguish between sources of coliform contamination. There is a technology available that can distinguish among different sources of fecal coliform. It is called Microbial Source Tracking (MST). Many other regional boards have used MST technology successfully to determine the sources of potential pathogens. This technology is currently the national standard for identifying sources of waterborne pathogens. It is the method of choice of many

other states across the U.S., in Canada, and in the European Union. Yet 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.

Federal EPA guidelines require that the Regional Board know the "natural" baseline--the contributions of terrestrial and aquatic wildlife--before setting standards for agricultural and human sources. Staff do not know the wildlife contribution, and without it, they can not set a meaningful TMDL.

Regional Board staff have refused for years to consider using MST to perform a baseline analysis, claiming that MST is an "experimental" and unproven method for determining the source of contamination, and that it would be too expensive. These statements are false. MST is well-established, endorsed by the Federal EPA, and widely used. A MST study would cost a fraction of the cost of the remediations that the Regional is imposing on ranchers.

In recent years, there have been multiple cases around the country in which regulators assumed the fecal coliform was coming from agricultural or human sources, only to discover, once they had done the right scientific study, that the major source of fecal coliform was wildlife. Three of those examples are from California – San Diego Bay, Morro Bay and Bodega Bay. In all three cases, it turned out to be birds--not agriculture—that were the major culprit. Tomales Bay is similar to these other bays, surrounded by the National Seashore and undeveloped private lands. The bay of interest in San Diego is home to 1,500 birds. Tomales Bay is home to over 25,000 aquatic birds and 1,500 seals. This is why it is meaningless and unfair for the Regional Board to impose TMDL requirements on the ranchers without first gathering wildlife baseline data.

It is also important to note that coliform is only an indicator that pathogens may be present, and coliform alone is not a pathogen. Because of demonstrated inadequacies in conventional indicator bacteria, including regrowth in the natural environment and no

significant correlation with health outcomes in waters subject to non-point source pollution, DNA test methods have already been used in the development of TMDL's. In addition, methods are being developed locally (at Lawrence Berkeley Laboratory) and elsewhere to assay directly for pathogens, using 16s gene technology known as the Phylochip that measures 32,000 taxa of bacterial including specific probes for pathogens including e-coli H157:07, a major culprit in crop contamination. In addition, major epidemiological studies using DNA testing methods are underway in Southern California, conducted by Southern California Cooperative Water Research Project (SCCWRP) As this technology becomes available, it should be applied to the analysis of contamination in Tomales Bay, to present the clearest picture of the true risk to the bay presented by runoff from neighboring lands.

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.

The Regional Board must follow Federal EPA guidelines which require that it knows the "natural" baseline--the contributions of terrestrial and aquatic wildlife--before setting standards for agricultural and human sources. To fulfill this guideline the Regional Board must carry out a proper Microbial Source Tracking study as outlined by the EPA to identify the sources of coliform contamination in Tomales Bay before imposing TMDL requirements on ranchers in the Tomales Bay watershed. As the Regional Board has identified much of the receiving waters as coastal recreational use, the Regional Board must also comply with the provisions of Public Law 106-284 Oct 2000, The Beach Assessment and Coastal Health Act

requirements, which state in part:

“SEC. 3. REVISIONS TO WATER QUALITY CRITERIA.

(a) STUDIES CONCERNING PATHOGEN INDICATORS IN COASTAL RECREATION WATERS

Section 104 of the Federal Water Pollution Control Act (33 U.S.C. 1254) is amended by adding at the end the following:

(v) STUDIES CONCERNING PATHOGEN INDICATORS IN COASTAL RECREATION WATERS

Not later than 18 months after the date of the enactment of this subsection, after consultation and in cooperation with appropriate Federal, State, tribal, and local officials (including local health officials), the Administrator shall initiate, and, not later than 3 years after the date of the enactment of this subsection, shall complete, in cooperation with the heads of other Federal agencies, studies to provide additional information for use in developing:

- (1) an assessment of potential human health risks resulting from exposure to pathogens in coastal recreation waters, including nongastrointestinal effects;
- (2) appropriate and effective indicators for improving detection in a timely manner in coastal recreation waters of the presence of pathogens that are harmful to human health;
- (3) appropriate, accurate, expeditious and cost-effective methods (including predictive models) for detecting in a timely manner in coastal recreation waters the presence of pathogens that are harmful to human health; and
- (4) guidance for State application of the criteria for pathogens and pathogen indicators to be published under section 304(a)(9) to account for the diversity of geographic and aquatic conditions.”

The EPA guidelines for reviewing TMDLs (May 20, 2002, available at: <http://www.epa.gov/owow/tmdl/guidance/final52002.html>) state that the submittal should include the identification of point and nonpoint sources of pollutants including the natural background of nonpoint sources. The EPA guidelines ask for information on natural background because they are aware of many examples from across the country in which wildlife have been shown to be a major source of fecal coliform.

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Meillier, Laurent@Waterboards

From: David Lewis <djllewis@ucanr.edu>
Sent: Wednesday, October 16, 2013 3:26 PM
To: Meillier, Laurent@Waterboards
Subject: Conditional Waiver Renewal Comments
Attachments: UCCE Lewis TB CW Renewal Comments.pdf

Mr. Meillier,

Please accept the attached comments on the 2013 Renewal of Conditional Waiver of Waste Discharge Requirements for grazing operations in the Tomales Bay Watershed I am submitting for your consideration. I am available and committed to work with you, Marin's grazing livestock operators, and the conservation partnership to continue the progress we have made on ranches and in the watershed. Please do not hesitate to contact me with any questions and needs for additional information.

Respectfully,

David J. Lewis
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 University of California
Agriculture and Natural Resources





October 16, 2013

Laurent Meillier
Engineering Geologist
Non-point Source Section
San Francisco Bay Regional Water Quality Control Board
Transmitted via email LMeillier@waterboards.ca.gov

Subject: Renewal of Conditional Waiver of Waste Discharge Requirements for grazing operations in the Tomales Bay Watershed

Mr. Meillier,

Introduction

Thank you for this opportunity to provide comment on the San Francisco Bay Regional Water Quality Control Board's (Water Board) Renewal of Conditional Waiver of Waste Discharge Requirements for grazing operations in the Tomales Bay Watershed (Conditional Waiver Renewal). Additionally, thank you and Jim Pontoon for making yourselves available to present this proposed renewal to Marin County Farm Bureau and the Sonoma Marin Animal Resource Committee. Additionally, thank you for holding a public workshop on the program during the public comment period. I also want to acknowledge the Water Board for considering renewal of the waiver offer the other options and approaches it could pursue.

During the development of the 2007 Tomales Bay Pathogen Total Maximum Daily Load (TMDL) and the original Grazing Land Conditional Waiver approved in 2008, your agency actively participated and supported a broad based collaborative effort to formulate these policies and programs so that they were feasible and reasonable and that efforts to provide technical and financial assistance were coordinated in achieving the TMDL and the Conditional Waiver objectives. As noted in the Conditional Waiver Renewal, of the 236 unique property owners eligible under the current waiver, 99 have submitted Notices of Intent and 112 have submitted Notices of Non-Applicability. This is an 89% participation rate in a program that was precedent setting in regulating these extensive grazing agricultural operations. This high level of participation was largely the result of the partnership and collaboration that made time and resources available to assist eligible ranchers and farmers with submission of these forms and developing their ranch water quality management plans.

The following comments and recommendations are provided in that same spirit of collaboration and partnership, and with the hope and anticipation that the Water Board will continue to participate in and support the existing conservation partnership.

Evaluating Watershed Conditions and TMDL Load Allocations

In 2005, I provided comments on numeric targets in the then draft Pathogen TMDL using data from the Tomales Bay Shellfish Technical Advisory Committee (O'Connell et al. 2000) to ask questions about the timing and location for obtaining water quality objectives and load allocations. Primarily, that while the TMDL load allocations are based on a hydrodynamic model estimate of tributary stream conditions required to meet shellfish harvesting water quality objectives, the load allocations do not account for what is attainable in the watershed based on background levels.

Today, data from the Tomales Bay Watershed Council and Water Board monitoring programs can be used to ask the same questions. Returning to Table 2 in the Conditional Waiver Renewal (Page 7), the allocation from "Open space lands (terrestrial wildlife)" directly to the Bay is a median of <14 (MPN/100ml) and 90th percentile of <43 (MPN/100ml) and to major tributaries a log mean of <200 (MPN/100ml). 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.

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 status determination "Improvement Needed" in the Tomales Bay Pathogens TMDL Progress Report (CRWQCB, 2013) and ambiguity about that status in Section 1 for the Waiver Renewal (page 2) points to the need for this. 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 in Tables 2 and 3 of the Conditional Waiver Renewal (page 7) are based upon watershed conditions. The conservation partnership also deserves this evaluation so that the decisions for on-ranch management practice implementation are maximizing funds and efforts towards the greatest improvement in water quality. Lastly, this evaluation goes hand in hand with the ongoing review of data and classification reevaluation done for the shellfish growing areas by the California Department of Public Health (Zubkowsky-White, 2013).

The process and approach for doing this is already established within the *Adaptive Management* section of the 2007 Pathogen TMDL. This approach to adaptively review the regulation and evaluate new and relevant information is a real opportunity because new information and data exists. In addition to the baseline water quality monitoring program outlined in Table 4-25 of the TMDL, these include but are not limited to:

- The Tomales Bay Watershed Council trend water quality monitoring initiated in 2007 at 11 watershed locations and three bay locations (Carson, 2012). Program data is available online and by request and provides for the comparison of reference watersheds to those with source land use. This work was also carried out in collaboration with Point Reyes National Seashore staff monitoring the responses and outcomes of the Giacomini Wetland Restoration Project (Parsons, 2005).

- The California Department of Public Health’s annual sanitary surveys. Working closely with Tomales Bay shellfish growers, CDPH staff conduct annual Bay water quality and shellfish meat monitoring for pathogen levels to protect consumers (Zubkousky-White 2013).
- The University of California Cooperative Extension completed a five estuary study of the dynamics of bacterial transport, including Lagunitas and Walker Creeks (Lewis et al., 2012), providing data-driven models for the influence of stream flow and tides on bacterial levels.
- *A Half Century of Stewardship* (Lewis et al., 2011), Marin’s Conservation Partnership programmatic review from 1959 to 2009 of the on-ranch conservation efforts completed. This includes the restoration and improved management of approximately 40 miles of stream and prevention of more than 675,000 cubic yards of sediment delivered to water ways. Since 2009, on-ranch implementation of water quality improving management practices has continued.
- The documentation and understanding of conservation and management practice effectiveness has advanced with work locally to understand the outcomes from riparian restoration (Lennox et al., 2009) and manure management to reduce un-ionized ammonia levels in area watershed (Lewis et al., 2005). Additionally, work regionally and nationally are providing needed direction for use of these practices on rangelands (Briske, 2011) in general and for pathogen management specifically (Atwill et al. 2012).
- Understanding of the relationships of extensive, grazing livestock operations and water quality (Lewis et al. 2005 and Roche et al. 2013) as well as management for bacterial water quality from specific management units on-farm (Lewis et al. 2009, Lewis et al. 2010, Miller et al. 2007 and Miller et al. 2008).

These newer sources of information and data can be combined with the Water Board’s ongoing monitoring, and earlier monitoring and study efforts (Rugg, 2000, O’Connel et al. 1996, Musselman, 1980, Jarvis et al. 1978, Sharpe, 1974, Smith et al. 1971) to comprehensively review what is known and what more needs to be known about Tomales Bay Water Quality including trends over time in bacterial water quality levels. This review can then be used to critically evaluate how conservation and management measure actions have or have not had an impact on those conditions and the implications this has for the TMDL load allocations.

Residual Dry Matter – A management tool and not a regulatory standard

The Water Board approved Residual Dry Matter (RDM) as a monitoring requirement for the Napa River and Sonoma Creek Pathogen TMDL and Grazing Land Conditional Waiver, approved after those for Tomales Bay and largely adapting the language of the Tomales Bay programs. In the Conditional Wavier Renewal for Tomales Bay, this monitoring requirement is being added. For both TMDLs and Conditional Waivers, it is important to understand the purpose and intent of RDM as a rangeland management tool not a regulatory standard. RDM is highly variable across the landscape as a function of soil type, slope and aspect. Additionally, there are many factors and situations a manager faces in which a decision needs to be taken that will result in low RDM levels. These include severe drought conditions and strategic and targeted grazing and burning for weed control. Adhering to a strict RDM minimum standard would preclude the manager from responding to annual variability in rangeland conditions or threats to rangeland plant communities and productivity.

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.

Conclusion

Again, thank you for this opportunity to provide these comments and suggestions. I am committed to working collaboratively with Marin's grazing livestock operators and the conservation partnership, including the Water Board, to continue the progress we have made on-ranch and in the watershed. Please do not hesitate to contact me with any questions or needs for additional information.

Respectfully,



David J. Lewis,
Director and Watershed Management Advisor

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