

San Diego Bacteria TMDL Meeting, 02/24/16

Meeting Notes, Action Item List, Decision Record, and Parking Lot

MEETING NOTES

The meeting summary is organized around major points in the meeting agenda, which is included at the end of the meeting summary, along with a list of attendees. Agreements are **highlighted in bold**. Action items are listed at the end of the meeting summary.

1. Introduction and purpose of meeting

The purpose of the meeting was to:

- Discuss and decide on response to State Water Board's Bacteria Plan
- Hear and discuss permittees' response to Regional Water Board's perspective on the project
- Discuss elements and time frame for development of risk-based approach
- Identify next steps

2. Meeting notes, action items, etc.

Michelle Mata had provided comments on the January 26 meeting summary and these will be incorporated into a revised document. Brock Bernstein updated the status of items on the Action Item list and will include these updates in the next version of the list.

3. Response to State Water Board presentation

(see Mtng Bacteria Workgroup 02-24-16 Considerations for State Board REC WQO Updates.docx distributed with this meeting summary)

Brief discussion identified a number of edits to the document that will be made by Dustin Bambic (**AI**), who will also prepare the memo including supporting data and analyses demonstrating the effect on exceedance rates of using the STV vs the SSM (**AI**). Both items will be sent to the full team for review.

4. Permittee reaction to Regional Board's perspective

(see Mtng Bacteria Workgroup 02-24-16 MS4 Practical Outcomes_rev 2-22-15.pptx distributed with this meeting summary)

Drew Kleis presented an overview statement highlighting the following points:

- The TMDL is a vehicle to get to a concrete implementation plan and budget, but that is difficult when the TMDL is still being revised
- The permittees need some certainty about implementation so that they can make budget requests for capital improvement projects. Public bodies and the public need certainty about the path forward and that outlays will address sources of problems.
- It is important to avoid "evaluate later" language and wrap up the things we can

The discussion broke into two broad categories.

TMDL and compliance determination

- Jimmy Smith stated that the Regional Board's perspective started from an emphasis on beneficial uses and the recognition that the TMDL is only way to achieve these goals. In some cases, other pathways can allow for achieving beneficial use goals sooner and more easily than through the TMDL. The

Practical Vision provides guidance about where resources can best be prioritized. For example, he would rather change the objectives once in the Basin Plan and then have the TMDL follow suit with complementary material. This would not slow down the process

- Don't necessarily tie reopener schedule to specific dates, but to triggers such as completion of key studies, that would provide a basis for reconsideration
- In terms of compliance, Jimmy said that the TMDL desires to achieve WQOs irrespective of use and at all times, but can also tier implementation and its timing to identify different location within different times in order to prioritize the highest risk areas with the greatest payoff from input of effort and resources. For example, compliance in creeks could be a long-term goal with compliance placed far out in the future; this is one point where the existing compliance schedule could be adjusted to allow creeks to be dealt with separately
 - Chris Crompton stated that a photographic study for a year saw no immersion in Orange County creeks, strongly suggesting there is no recreational beneficial use in inland creeks
- Todd Snyder said that, from the permittees' perspective, it would work to define compliance in phases with specific implementation mechanisms for each. Each phase, or chunk, would have its own set of definitions of what would constitute compliance.
 - For example, beaches are in mostly compliance in dry weather but need more work on reducing human sources, and there is a need to keep working on better source and risk-based methods. However, epidemiology are studies not possible for creeks because of the extremely small sample sizes, which prevents applying illness rate targets to creeks. As a result, a reference approach will be needed if fecal indicator bacteria will continue to be used in creeks. Jimmy Smith pointed out that, because the relative proportion of human and nonhuman sources is not the same in urban and reference areas, there are concerns about the validity of the reference approach. The solution is to move the compliance point out of the creeks and to beaches where a risk based approach can be used. If a 3rd party samples in a creek, then that's a permit issue and the consequence will depend on what the permit says about that situation
- Jimmy Smith is open to site specific objectives for wet weather, particularly since it would be foolish not to somehow use the Surfer Health Study results now that they are available. He suggested adding language to the Basin Plan Amendment and the TMDL to set the stage for future discussion about a risk-based approach and the level of allowable risk. That conversation can start now (but see item #5 below for further discussion)
- Jeremy Haas outlined **a three-step process for moving forward that received general agreement:**
 - Decide on near-term actions, implementation
 - Open the risk-based approach discussion
 - Co-permittees propose new approaches
- Jimmy Smith provided more detail on these general suggestions
 - In the short-term, complete the new TMDL, change compliance point(s), extend deadline(s) based in part on results of CBA
 - In the intermediate term, the Surfer Health Study and other new studies (e.g., developing better indicators) are starting to suggest that the impact to beneficial uses is not really accurately measured by the E coli and Entero indicators; if so then we should keep moving toward measuring actual pathogens
 - Over the long term, have the discussion on a risk-based approach
- Jeremy Haas suggested, and **all agreed**, that it is time to move the discussion away from abstract concepts and to more concrete proposals. The permittee team will begin preparing written descriptions of implementation pathways building on the concepts agreed on during the past two workgroup meetings (AI)

Connections with the sewage collection system

- Jimmy Smith said that, as the owners and operators of the MS4, the law says the municipalities need to know what comes into their systems. However, Todd Snyder said that should be a dual responsibility that collection systems should be part of and that this responsibility is not shared now.

Jimmy Smith said that Board staff need to better understand the relationship between the MS4s and the collection systems, especially for events and issues that extend beyond spills to more proactive steps to identify and prevent leaks

- Jeremy Haas stated that he would like to see an approach for defining the MS4 contribution and how they would make the case that they are not responsible for more than that. However, this would still leave the burden of proof, and the risk for accuracy/inaccuracy, on the municipalities. For example, sewage agencies commonly say that proactively checking for leaks is not a permit requirement, but that will respond if the MS4s provide them concrete evidence. Dustin Bambic suggested that the TMDL could define how the conversation would take place when human markers are found in the MS4
- Chris Crompton said that, based on experience in Orange County where a comprehensive evaluation found leaks everywhere, it will take a huge effort to track and identify leaks and their sources; this is not something the MS4s can or should undertake on their own
 - Waste Discharge Requirements could be used to require sewage agencies to track down leaks
 - Chris Crompton said that this will require much more than simple video studies; there are a wide number of techniques needed, some quite sophisticated
 - Jimmy Smith said the Board staff would welcome technical help on defining the types of studies needed; that information could then go into the source identification and implementation portion of the TMDL
- The Regional Board staff is willing to address this issue, but needs more information, and, in particular, needs facts to write orders. From the permittees' perspective, they need a way to obtain certainty that they are meeting compliance requirements
 - Jimmy Smith suggested that it might be possible, once human markers are identified in the MS4, to quantify the load associated with those markers, and then deduct that amount of load from the MS4s' load reduction requirements
- There was general agreement that the following issues are key to this discussion:
 - How to engage the sewer agencies in the conversation and, ultimately, how to require them to take on an appropriate degree of shared responsibility
 - How to provide a pathway to compliance for MS4s that includes, but extends beyond, handing off specific problems to the sewer agencies
 - How to build the relationship and shared responsibility into the TMDL
- The workgroup agreed that:
 - The overall issue will be briefly raised at the March 4 SCCWRP Commission meeting (**AI**); further discussion might take place at the June Commission meeting
 - The consultant team will prepare a write-up (white paper) of current knowledge about the role of the sewage collection system in contributing to contamination of the MS4 and impacts on beneficial uses (**AI**). This will be a literature review and any workgroup members with reports, data, anecdotal information, or other sources will provide this to Clint Boschen, who will work with Dustin Bambic and Chris Minton to prepare a draft write-up. This write-up would be included as part of the targets and sources section of the TMDL / Basin Plan Amendment

5. Time frame for risk-based approach

It is unclear what the specifics would be of developing this approach, or how long this would take. Therefore, the workgroup agreed to keep the focus on implementation and compliance for now and add a placeholder to the TMDL to set the stage for future discussions on a risk-based approach. For example, there is no real understanding or agreement about the difference between “protective” and “acceptable.” However this develops, the permittees need a pathway to compliance in the interim.

One interim step could be to assess how similar the source profiles at the beaches used for the Surfer Health Study are to other beaches in the region. That could provide a means for including other beaches in a site-specific objective and for extending some elements of a risk-based approach to other beaches. That might be something that could be included in the white paper on human sources (**AI**). This would

also support the long-term process to develop better risk-based indicators instead of fecal indicator bacteria. However, any changes to the Basin Plan or the TMDL cannot reduce the level of protection established by the Ocean Plan.

Whatever develops, the Board will want to understand why any changes are protective.

Board staff would like the State Board to establish a target (e.g., 32) and then leave Regional Boards free to develop more stringent objectives, based on other indicators, illness rates, etc. Board Staff will clarify the State Board's intent (**AI**).

6. Next steps

See the Workgroup Action Items Report for a complete list of all action items and their status. The next meeting will focus on implementation.

7. Next meeting date

The next workgroup meeting will Wednesday, March 23, from 1:00 – 4:00 PM, per the agreed meeting schedule.

Attendees

Regional Board: Jeremy Haas, Michelle Mata, Jimmy Smith

San Diego City: Drew Kleis, Ruth Kolb

San Diego County: Todd Snyder, Jo Ann Weber

Orange County Public Works: Chris Crompton, Jian Peng

Team: Dustin Bambic, Clint Boschen, Ashli Desai, Chris Minton, Brock Bernstein

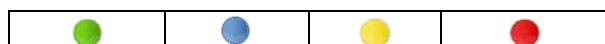
AGENDA

1. Introductions and Purpose of Meeting (1:00-1:05 pm)
2. Meeting Notes, Action Items, Decision Points, and Parking Lot Review (1:05-1:20 pm)
 - a. Purpose: Review meeting notes, action items, parking lot and decisions from December and January meetings
 - b. Handout: Meeting notes with action item, decision points, and parking lot tables
 - c. Relevant studies: None
 - d. Decisions: Agreement on meeting notes, action items and decisions
3. Response to State Water Board Presentation (1:20-1:35 pm)
 - a. Purpose: Discuss key points to send to State Water Board on the Bacteria Plan presentation from 1/26/16
 - b. Handout: Draft messages
 - c. Relevant studies: None
 - d. Decisions: None
4. Permittee Reaction to Regional Water Board's Perspective on Project (1:35-2:45 pm)
 - a. Purpose: Presentation of thoughts on information presented by Regional Water Board staff at 1/26/16 meeting
 - b. Handout: None
 - c. Relevant studies: None
 - d. Decisions: May be outgrowth of discussion
5. Regional Water Board perspective on elements and time frame for risk-based approach development (2:45-3:15 pm)
 - a. Purpose: Provide more detail on the longer term move towards risk-based objectives discussed by Regional Water Board staff at 1/26/16 meeting
6. Process moving forward and next steps (3:15 pm-4:00 pm)
 - a. Purpose: Based on discussion of previous two agenda items and previous meeting, determine next steps for process
 - b. Handout: None
 - c. Relevant studies: None
 - d. Decisions: Next steps in process and topics for next meeting

San Diego Bacteria TMDL Workgroup Action Items Report

Key to status colors:

- **Green** indicates a completed deliverable
- **Blue** indicates greater than 30 days until the deliverable is due
- **Yellow** indicates a deliverable is due within 30 days
- **Red** indicates an overdue deliverable



Mtng Date	Deliverable	Assigned To	Due Date	Status	Comments
08/27/15	List of studies, completion dates, value added, implications for reopener	Consultant team	09/02/15	●	
08/27/15	Distribute draft cost sharing agreement	Todd Snyder	09/10/15	●	
08/27/15	Review past MOUs to assess whether useful concepts or language can be borrowed for this MOU	Drew Kleis, Ruth Kolb	09/10/15	●	
08/27/15	Discuss cost sharing agreement	Workgroup	09/10/15	●	
08/27/15	Finalize MOU	Workgroup	09/10/15	●	
08/27/15	Michelle Mata to meet with small group to review planned overall approach and its relationship to schedule; develop picture of how pieces fit in logical progression	Michelle Mata, Clint Boschen, Chris Minton, Ashli Desai, key permittees	10/7/15 meeting handout	●	
09/0/15	Evaluate implications of 32 vs. 36 illness rate using available monitoring data from creeks and beaches	Chris Minton, Dustin Bambic	10/7/15 meeting presentation	●	
09/10/15	Frame a more formal description of how a risk-based framework could be used in the TMDL	Ruth Kolb	10/7/15 meeting handout	●	
09/10/15	Develop options for calculating geomeans that account for varying intensities/frequencies of monitoring events	Chris Minton, Dustin Bambic	10/7/15 meeting presentation	●	
09/10/15	Expand the example table (single sample vs. STV) to include a column showing how the geomean compares to the single sample and STV results	Chris Minton, Dustin Bambic	Undefined, but soon	●	

Mtng Date	Deliverable	Assigned To	Due Date	Status	Comments
09/10/15	Prepare a set of scenarios showing a range of comparisons across the options presented	Chris Minton, Dustin Bambic	10/7/15 meeting presentation	●	
10/07/15	Prepare background information on the basis for the 32 vs. 36 illness rates	Chris Minton, Dustin Bambic	10/29/15 meeting	●	
10/07/15	Add language to draft TMDL targets memo to explain the applicability of the reference reach analysis in the risk-based framework	Chris Minton, Dustin Bambic	10/29/15 meeting	●	
10/07/15	Prepare a draft decision flow chart	Ashli Desai, Clint Boschen	10/29/15 meeting	●	
10/07/15	Prepare a draft Technical Report outline	Team	12/10/15 meeting	●	
10/29/15	Prepare background information on STV	Team	11/12/15	●	
10/29/15	Provide comments on draft decision flow chart and draft TMDL targets memo	RWOCB staff	11/6/15	●	
10/29/15	Provide revised TMDL targets memo and flow chart based on comments	Team	11/12/15	●	
11/19/15	Provide more detail on analyses needed to compare the two illness rates, along with cost and time estimate	Team			Hold off for now
11/19/15	Approach State Board about Workgroup meeting with them as a focus group	Jeremy Haas	12/10/15 meeting	●	
11/19/15	Examine the 13241 requirements to identify what information would be needed to address those	Team		●	Completed and ready to insert into draft documents when needed
11/19/15	Add the caveat to the draft language that the 32 illness level is a "working assumption"	Team	12/10/15 meeting	●	
11/19/15	Describe the statistical background and rationale for the EPA 2012 criteria	Team		●	
11/19/15	Add a minor revision to the language in the alternative on Slide 7 to capture the potential for regional linkages	Team	12/10/15 meeting	●	
11/19/15	Develop ideas for prototypes or case studies of site-specific objectives that would illustrate different issues such as natural source exclusion	Team	TBD		Longer term
11/19/15	Develop revised language related to allowable exceedance frequency	Team		●	
11/19/15	Prepare an explanation of "safe" in different contexts and what the implications could be for action in response to different types of monitoring outcomes	Team			Longer term

Mtng Date	Deliverable	Assigned To	Due Date	Status	Comments
1/26/16	Prepare data comparing STV and SSM to send to SWRCB and RWQCB	Team	03/15/16	●	
1/26/16	Make the suggested minor edits to the list of items of potential concern on bacteria policy for SWRCB.	Team will prepare initial list and provide to RWQCB. RWQCB will send to SWRCB.	Dustin Bambic	●	
02/24/16	Prepare data memo comparing STV to SSM to send to SWRCB. Send to entire team for review.	Dustin Bambic	03/15/16	●	
02/24/16	Briefly raise the issue of the potential contribution of leaking sewer collection systems to the bacteria problem at the March 4 SCCWRP Commission meeting	Todd Snyder	03/03/16	●	
02/24/16	Prepare a white paper summarizing evidence for the role of leaking sewer collection infrastructure. Provide data, references, and other information to Clint Boschen, who will work with Dusting Bambic and Chris Minton to prepare a draft white paper that would be included as part of the targets and sources section of the TMDL / Basin Plan Amendment	Team	04/15/16	●	
02/24/16	Begin preparing written descriptions of implementation pathways building on the concepts agreed on during the past two workgroup meetings.	Team	03/23/16	●	
02/24/16	Clarify whether State Board's Plan will allow Regional Boards to establish more stringent targets, using other indicators, than identified in the State Plan.	Regional Board staff	03/23/16	●	

San Diego Bacteria TMDL Workgroup Decision Record

Number	Date	Decision	Type	Yes	No	Abstain
2015-1	09-02-15	Allow two weeks for review of meeting notes	Consensus			
2015-2	09-02-15	Michelle Mata to take on central coordinating role	Consensus			
2015-3	09-02-15	Materials for discussion/review distributed minimum of 10 calendar days before meeting	Consensus			
2015-4	09-02-15	Meeting agendas to include decision points, discussion lead, intended outcomes, and reference to background documents	Consensus			
2015-5	09-02-15	Use 9/10 meeting as trial run for planned approach to more detailed discussion	Consensus			

2015-6	09-10-15	Future discussions of methods for calculating exceedance rates and related topics will account for different settings (freshwater, marine, bays) where this has important implications for the policy	Consensus			
2015-7	10-07-15	Overall schedule of completion between December 2017 and April 2018 with target of September 2016 for technical report	Consensus			
2015-8	10-07-15	Documentation and justification of assumptions will be provided in technical report	Consensus			
2015-9	10-07-15	Use of risk-based framework is appropriate	Consensus			
2015-10	10-29-15	Both the 36 and the 32 per 1000 illness rates are scientifically defensible and the 32 per 1000 illness rate represents an incremental improvement in water quality in accordance with the 2012 USEPA criteria. The 32 per 1000 illness rate has been selected with the possibility of revision based on the results of the Cost Benefit Analysis and/or if the SWRCB selects the 36 per 1000 illness rate as part of the Revision of Bacterial Objectives.	County San Diego, City of San Diego and RWQCB agreed. Pending final agreement from Orange county			
2015-11	10-29-15	<i>E. Coli</i> as the single indicator for freshwater and Enterococcus as the single indicator for marine waters	Consensus			
2015-12	11-19-15	Documents be worded to reflect that the choice of the 32/1000 illness rate is a working assumption. Revises Decision #2015-10	Consensus			
2015-13	11-19-15	The geometric mean is an appropriate TMDL target for dry weather because it is a good indicator of the level of risk over time, but additional thought needs to be given to the details of monitoring, averaging period, etc. in order to best measure trends in risk over time	Consensus			

San Diego Bacteria TMDL Workgroup Parking Lot

Meeting Date	Issue	Tentative Meeting Date for discussion
9/10/15	Relationship of monitoring locations and procedures to compliance	TBD
10-29-15	Purpose of Cost Benefit Analysis Study and alternatives to be considered in the study	December or January
10-29-15	Need for 13241 analysis for proposed objectives	TBD
10-29-15	Methodologies for monitoring and analysis	TBD
10-29-15	Approach for addressing non-MS4 contributions (particularly wastewater) in TMDL	TBD
11-19-15	Align the definition of dry weather in the TMDL and the permit	TBD