

San Diego Bacteria TMDL Meeting, 01/26/16

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:

- Hear an update from the State Water Board on their Bacteria Policy
- Hear and discuss the Regional Water Board's perspective on the project
- Discuss and agree on next steps

2. *Meeting Notes, Action Items, etc.*

There was no substantive discussion of meeting notes from past meetings.

3. *Status of State Water Board's Bacteria Policy*

Zane Poulson of the State Water Board summarized the current status and likely next steps for the State Water Board's Bacteria Policy. Main items included:

- The State Water Board process is specific to Water Board policies and does not have the authority to supersede Department of Health Services policies related to beach monitoring or closures
- The draft policy must go through internal review, including by Office of Chief Counsel, and they are hoping to release the policy for public review in April, with public review extending through May, and final adoption scheduled for August or September
- The plan is to use a single indicator for fresh water (*E. coli*) and marine waters (*Enterococci*)
- The plan is to use the USEPA threshold of 32 illnesses per 1000 recreators. This is not likely to matter much for implementation because in most cases if indicators are above targets associated with 32 they are also above targets associated with 36
- The selection of the 32 illnesses endpoint is based on USEPA's analysis and their determination that this is protective. The State Water Board is not conducting a separate assessment of what is "safe" and Zane noted that at some point this becomes a policy decision in terms of what is acceptable risk
- The new policy will supersede numeric objectives in Basin Plans but not the narrative objectives. The new Bacteria Policy will also update both the Ocean Plan and the Inland Waters and Bays Plan
- Targets will be based on the geomean of a minimum of 5 samples spaced equally over a 6 week period, and the Statistical Threshold Value (STV) with an allowance of 10% exceedances
 - Dustin Bambic will send Zane the analysis results showing that replacing a single-sample value with the STV results in a much higher exceedance frequency, even with the same underlying data (**Action Item**)
- The economic analysis has been contracted out to a consulting firm and Zane did not have details available on the scope or content of the analysis
- The State Water Board is very interested in the results of local studies in the San Diego region
- The new policy will include a natural source exclusion, although Zane noted that previous studies have always found some human source. The policy will also include provisions for a reference system to set allowable exceedance frequencies, high flow suspension in places and times where people should not be swimming, and seasonal suspensions when flow is so low that swimming is not feasible

or the stream is frozen. There may also be a limited REC 1 use where there is a very low opportunity to swallow water. There will be no separate wading or fishing uses with different thresholds

- The policy will allow regional boards to implement the above exclusions but will not include actual implementation language. It is not clear whether such provisions at the regional level would need to go through a Basin Plan amendment process if they are allowed in the state policy. Zane will check on this (**Action Item**)
- The new policy is silent on monitoring methods in order to allow improved methods to be used. However, new indicators are not allowed, including pathogens or number of illnesses
 - Regional board staff asked Zane to reconsider this because the science is close to developing the ability to measure actual pathogens at a reasonable cost and turnaround time
- Existing TMDLs and permits will remain the same until they are updated
- The new policy did not address REC 2
 - There are likely to be comments about this because the REC 2 standards are typically a multiplier of the REC 1 standards
- The new policy is silent on mixing zones, which are considered more of a regional concern
- The permittees and the consulting team will develop a list of concerns and forward them to Michelle Mata (**Action Item**) and then the Regional Board staff will package these up with their comments and forward them to State Water Board staff (**Action Item**)

4. Regional Board's perspective

(See Mtng Bacteria TMDL Workgroup 01-26-16 presentation.pptx distributed with these meeting notes)

Regional Board staff presented their perspective on how to move forward with a risk-based approach in the context of the TMDL schedule, developing science, and the State Water Board's new policy.

Key points included:

- Overarching goal is to make waters safe to swim
- The two indicators in the State Board policy are better but not as good as what will be available soon and are still just indicators
- Want to work towards measurement of actual pathogens and have objectives that can reflect new science and information as it is developed to better link to safe to swim.
 - Want to support advancing and commercializing pathogen methods
 - SCCWRP has had success working with manufacturers to commercialize new methods; the hope is that new indicators would be available in 2 – 3 years
 - Goal is to have illness specific information rapidly available to recreators
- Establishing objectives based on risk will involve several factors, including:
 - Available science
 - Determination of what is reasonable?
 - Cost benefit analysis
 - What is technically feasible?
 - A demonstration of efforts, and their relative efficacy, to date is necessary
 - What is socially and politically acceptable?
 - Determining whether all illnesses or just gastrointestinal illness are considered
 - Exclude illnesses due to just the action of swimming and not pathogens, e.g., hydrostatic pressure, being wet
 - Consideration of GI, plus skin rash, sinus infection, ear ache, and others
- Determining what is socially and politically acceptable will involve more parties than just those around this table
 - It will be difficult to define what society will be willing to accept
 - A transparent public process will be required

- This will involve getting beyond the circularity inherent in the USEPA argument that is based on detectability
- Going through the process of determining an acceptable level of risk (i.e. the allowable number of illnesses) will take several years so need to set that decision aside and focus on practical changes that we can accomplish in the next year or two
 - Update indicators and focus on implementation provisions
 - Modify allocations to account for things like elimination of sanitary sewer collection loads and new indicators
 - Evaluation of feasibility of schedule. The CBA will inform judgments about reasonableness of deadlines and what will work or not
 - Implementation provisions such as compliance points
- It is important to decide how non-MS4 sources are brought into the discussion and where the burden of proof should lie
 - For example, permittees suggested considering how to bring requirements into the SD WDR and relationship to the 20 year plans for sewer rehabilitation
 - Estimate over time the pathogen reduction that would be due to compliance with the prohibition of discharge upstream of a treatment plant
 - Consider impacts of leaking infrastructure as well as failing infrastructure
 - Consider using Tecolote Creek as a case study to evaluate how could consider addressing sanitary sewers
 - The copermitees and RWQCB need to have a better understanding of loadings/contributions to the MS4 systems from the sanitary sewage collection systems and how to best address the problem
- The specific implementation provisions considered in the Region will depend to some extent on what is included in the SWRCB policy and how these provisions are worded
- The linkage to the various permit requirements and in particular the MS4 permit is important
 - Consider establishing a process to allow for greater focus on the higher risk sources first while continuing to work on the risk-based objectives
- Jimmy Smith suggested starting with wrapping up the justification for using E. Coli and Enterococcus first and then moving into discussion of implementation
 - If SWRCB moves forward on the established schedule then the group could move straight to implementation because the work on the objectives would be completed by the SWRCB
- Questions raised by Jimmy Smith:
 - How do the load reduction milestones change in the near term if the indicators are changed?
 - Does the need for structural BMPs go away if the human pathogens are eliminated?
 - How can the MS4s make a commitment to get sources out of the storm drain?

5. Next steps

See the Workgroup Action Items Report for a complete list of all action items and their status.

6. Next meeting date

The next workgroup meeting will be Wednesday, February 24, from 1:00 – 4:00 PM, per the agreed meeting schedule.

Attendees

Regional Board: Jeremy Haas, Michelle Mata, Jimmy Smith, Helen Yu

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 11/19/15 meeting and changes to 10/29/15 notes and decision record
 - 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. Update on State Water Board's Bacteria Policy (1:20 pm -2:00 pm)
 - a. Purpose: Information item provided by State Water Board staff
4. Overview of Regional Water Board's Perspective on Project and Relationship to Bacteria Working Group (2:00 pm -2:45 pm)
 - a. Purpose: Presentation of overall scope of Regional Water Board's work related to the evaluation of Rec-1 WQO's
5. TMDL Targets-Discussion Item (2:45 pm-3:15 pm)
 - a. Purpose: Presentation of scenarios and follow-up items from 12/10/15 meeting
 - b. Handout: None
 - c. Relevant studies:
 - d. Decisions: May be outgrowth of discussion
6. Revisit of Goals/Desired Outcomes for Bacteria TMDL Reevaluation (3:15 pm-3:45 pm)
 - a. Purpose: Look at goals discussed early in process to ensure still appropriate and get agreement that everyone has same goals and determine desired outcomes based on those goals and information presented in agenda item 5.
 - b. Handout: None
 - c. Relevant studies: None
 - d. Decisions: None
7. Next Steps and Action Items (3:45 pm-4:00 pm)












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	●	

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	RWQCB 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			
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			
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			
1/26/16	Prepare data comparing STV and SSM to send to SWRCB and RWQCB	Team			

1/26/16	Prepare 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.			
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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	Consensus			

		details of monitoring, averaging period, etc. in order to best measure trends in risk over time				
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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