San Diego Bacteria TMDL Meeting, 03/23/16

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. Meeting notes, action items, agenda, etc.

The purpose of the meeting was to:

- Review the proposed schedule of deliverables
- Review and discuss scenarios for the Cost Benefit Analysis (CBA)
- Continue ongoing discussion on sanitary sewer contributions to bacterial/pathogen contamination
- Identify next steps

Jimmy Smith reported that the State Board will allow regional boards to establish more stringent targets than those identified in the statewide plan (completed Action Item from 02/24/16 meeting).

Jimmy Smith said that he plans to revise the memo of concerns to the State Board to include the issue of potential contributions from the sewage collection system and to put forward a legislative concept to revise AB411 indicators and standards to be consistent with the EQP 2012 criteria (and the new state plan) (**AI)**. This memo will be circulated to the workgroup for review but will not be formally signed by workgroup.

2. Schedule and proposed deliverables

(see Mtng Bacteria TMDL Workgroup 03-23-16 Schedule.pptx distributed with this meeting summary)

Ruth Kolb briefly described the deliverables scheduled for delivery, review, and revision. The first set of deliverables on Slide 2 (Technical Report sections) are scheduled for completion by the end of this fiscal year. The second set (Progress and key decisions) will be completed next fiscal year. A detailed schedule is included on Slide 3.

Meeting the proposed schedule will require concentrated effort and participants expected that each major piece could be completed in 1 or 2 meetings. **Participants agreed with the sequence of topics and deliverables**.

3. Cost Benefit Analysis scenarios

Ruth Kolb and Jo Ann Weber summarized the discussion of scenarios during the morning CBA meeting. Key issues and agreements included:

- The workgroup should be directly involved in developing the scenarios because it has more technical insight than the CBA group
- The baseline against which the CBA scenarios will be compared should include the current set of stormwater programs, beach usage, health status, and benefits to the beach economy
  - Current stormwater programs encompass more than just the response to the REC1 issue. It may be possible to tease out this piece using information from the CLRPs and other documents
  - The current levels of effort are needed to provide context and help evaluate the relative change associated with each of the CBA scenarios

    - Current efforts by the sewage agencies should be included in the baseline
- The CBA Steering Committee did not discuss the scenarios in detail, but did agree that
    - The EPA 32 illness rate will be the starting point but this could change
    - The results from the Surfer Health Study could provide additional targets for evaluation but there are multiple ways to treat the wet and dry weather results and no agreement was reached on an approach
    - A high flow suspension was not seen as a high priority
    - Compliance points should be moved from creeks to the beaches, where the intensity of the beneficial use is much higher
    - A beach restoration approach was suggested that would be more holistic in some ways
    - Two main alternatives are to consider stormwater alone vs including other human sources (e.g., sewer collection systems)
- Both the MS4s and the Regional Board staff agreed on the value of a phased TMDL approach with extended schedule, with the exception of for dry weather beaches
    - It might be useful to realign the TMDL schedule to more closely match the municipal redevelopment schedules because planning and funding for these efforts are already in place and could provide some efficiencies
- The scenarios need to be described more completely and explicitly, and with appropriate background, in order to provide adequate direction to the CBA contractor. The contracting team was tasked with developing these written descriptions (**AI**)
- **There was general agreement that focusing on human sources as a priority is the best means of reducing risk**

4. Discussion on sanitary sewer contribution

(see Mtng Bacteria TMDL Workgroup 03-23-16 Source Analysis Overview.pptx distributed with this meeting summary)

Ashli Cooper-Desai summarized previous discussion on this topic (Slide 2) and described the overall approach to preparing this section of the technical report (Slide 3). She then summarized readily available literature on leaking infrastructure (Slides 5 and 6), transient populations (Slide 7), and spills (Slides 9 – 14). A proposed discussion schedule was presented on Slide 15.

Key issues and agreements included:

- **Participants agreed that this approach is on the right track in terms of the source analysis**, i.e., add missing pieces rather than redo this entire section of the TMDL
    - A decision has yet to be made about exactly where this new material will fit
    - In terms of the earlier request that the consulting team prepare a white paper, a formal document may not be necessary
- As much additional local information as possible will be needed for discussions with local sewer agencies; any participants with such information should forward it to Clint Boschen, as agreed earlier when the white paper was first discussed (**AI**)
    - It might be possible to estimate the amount of leaking sewage necessary to produce the observed concentrations of human markers in specific watersheds. Individual sponsors of or participants in the San Diego Watershed study will encourage Ken Schiff to produce such estimates (**AI**)
    - There may be GIS approaches that could be used to develop estimates of the number, location, and density of septic systems
    - John Griffith at SCCWRP has information on a new method using biofilms that can reliably distinguish a sewage collection system source

- Additional information on transient populations might be available from Rob Hutsel (San Diego River Park Foundation) and in reports produced by San Jose, Contra Costa County, and Ventura County
- There are sources of information that could help organize information on spills and improve predictive and modeling capacity, including the ASC scorecard, rough estimates of the loads from spills, information from plumbing/rooter companies, and a UCSB study that describes an index of likely sewer line leaks
- **Participants agreed that it will be important to start discussions with the sewage agencies earlier rather than later and to include NGOs in these discussions**
    - Participants agreed that Chris Crompton will approach his retired contact from a major sewage agency and invite him to the next workgroup meeting (**AI**)
    - Participants will forward questions related to the operation and monitoring of sewage collection systems to Michelle Mata (**AI**)

5. 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 further discussion of sources, CBA scenarios, and the operation of sewage collection systems.

6. 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: Cynthia Gorham, 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: Clint Boschen, Ashli Desai, Brock Bernstein

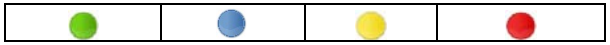
Agenda

1. Meeting Notes, Action Items, Decision Points, and Parking Lot Review (1:00-1:15 pm)
    a. Purpose: Review meeting notes, action items, parking lot and decisions from February meetings
    b. Handout: Meeting notes with action item, decision points, and parking lot tables
    c. Relevant studies: None
    d. Decisions/Desired Outcomes: Agreement on meeting notes, action items and decisions
2. Schedule and Proposed Deliverables (1:15-1:30 pm)
    a. Purpose: Discuss proposed schedule of initial deliverables
    b. Handout: None
    c. Relevant studies: None
    d. Decisions/Desired Outcomes: Agreement on initial deliverables
3. Cost Benefit Analysis Scenarios (1:30-2:45 pm)
    a. Project Element: Cost Benefit Analysis
    b. Purpose: Discuss potential CBA Scenarios
    c. Questions/Desired Outcomes: What scenarios should be evaluated as part of the cost-benefit analysis study to provide support for decision-making about modifications being considered as part of the TMDL reevaluation?
    d. Handout: Potential CBA Scenarios
    e. Relevant studies: Cost Benefit Analysis
    f. Previous discussions: None
    g. Decisions/Desired Outcomes: Agreement on potential CBA Scenarios
4. Initial Discussion on Sanitary Sewer Contributions (2:45-3:45 pm)
    a. Project Element: TMDL Source Assessment
    b. Purpose: Discuss available literature information on contributions of sanitary collection systems. Initial discussion on incorporating sanitary agencies into TMDL reevaluation process.
    c. Questions: Is current information sufficient to incorporate additional requirements for wastewater agencies? If not, what additional information needs to be incorporated? What information does the RWQCB have? How should wastewater agencies be brought into TMDL reevaluation process?
    d. Handout: None
    e. Relevant studies: Surfer Health Study Source ID, Tecolote Creek (to be discussed at future meeting)
    f. Previous discussions: February 24, 2016 (no decisions)
    g. Decisions/Desired Outcomes: None-information item
    h. Decisions/Desired Outcomes: Schedule and approach for communicating with wastewater agencies. Initial thoughts on division of responsibilities between wastewater agencies and MS4s in addressing sanitary sources.
5. Action items and agenda items for next meeting (3:45-4:00 pm)
    a. Purpose: Summarize action items and discuss potential agenda items

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	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			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		
03/23/16	Revise memo to State Board to include mention of sewer collection system and revision of AB411 standards to be consistent with EPA 2012 criteria. Distribute to workgroup for review.	Jimmy Smith	04/15/16		
03/23/16	Develop more detailed written descriptions of the CBA scenarios.	Team	04/15/16		
03/23/16	Submit any additional local information on studies of leaking infrastructure to Clint Boschen.	All	04/15/16		
03/23/16	Individual sponsors of or participants in the San Diego River study will encourage Ken Schiff to develop estimates of the range of leaking sewage needed to produce observed amounts of human markers.	All	04/15/16		
03/23/16	Invite retired sewage system expert to next meeting	Chris Crompton	04/15/16		

Mtng Date	Deliverable	Assigned To	Due Date	Status	Comments
03/23/16	Forward specific questions related to the operation and monitoring of sewage systems to Michelle	All	04/15/16		

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	*E. Coli* 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