MRP 3.0 C.8 Water Quality Monitoring Workgroup
FINAL Meeting Summary (approved Nov. 19, 2019)
Monday, August 19, 2019
9:30 am – 12:00 pm
RWQCB, 1515 Clay Street, Oakland

Attendees:
Bonnie de Berry (BASMAA facilitator, EOA)
Jim Scanlin (ACCWP, phone)
Lucile Paquette (BASMAA facilitator, CCCWP)
Michele Mancuso (CCCWP, Contra Costa County)
Amanda Booth (CCCWP, City of San Pablo)
Khalil Abusaba (CCCWP, Wood)
Courtney Riddle (CCCWP, phone)
Reid Bogert (SMCWPPP)
Chris Sommers (SCVURPPP, EOA)
Paul Randall (SCVURPPP, EOA)
Simret Yigzaw (SCUVRPPP, City of San Jose)
Jordan Ciprian (SCVURPPP, City of San Jose)
James Downing (SCVURPPP, Valley Water)
Kevin Cullen (FSURMP, phone)
Dale Bowyer (SFRWQCB)
Keith Lichten (SFRWQCB)
Jan O'Hara (SFRWQCB)
Kevin Lunde (SFRWQCB)
Zach Rokeach (SFRWQCB)
Jan O'Hara (SFRWQCB)

Objectives:

RWQCB & Programs continue to review current MRP C.8 Provisions and consider potential changes in MRP 3.0.

Meeting Handouts:

- Matrix of C.8 Provisions dated 8/19/19 (with BASMAA suggestions and previously agreed to changes)
- Factsheet: Assessing the Health of San Francisco Bay Area Creeks

Desired Outcome:

- Receive RWQCB perspectives on recent BASMAA suggestions
- Identify areas of agreement
- Identify information gaps that need to be addressed

Summary:
The group reviewed the Matrix of the C.8 Provisions which was updated 8/19/19 with BASMAA recommendations on a new approach to Creek Status Monitoring. Major findings

and lessons learned from the MRP 1.0 and 2.0 monitoring design (i.e., regional probabilistic) were discussed, including summaries provided in the Factsheet. The group agreed on the proposed "Watershed Assessment" approach to Creek Status Monitoring and identified information needs required to develop new permit language. The group agreed that the structure of Pollutants of Concern monitoring would stay the same with modifications based on lessons learned and evolving Bay Area priorities.

The sub-provision summaries below include agreements and discussions from the August 19 and April 25 C.8 Workgroup meetings.

C.8.a. Compliance Options: RWQCB and BASMAA agree that no changes to C.8.a are needed. RWB staff announced that they will be trying to bring the North Bay Counties under the MRP gradually. BASMAA expressed continued interest in collaboration and incentive for reduced monitoring (e.g. SSID projects); it was acknowledged that collaboration does not always equate to reduced cost.

C.8.b. Monitoring Protocols and Data Quality: RWQCB and BASMAA agree that no changes to C.8.b are needed. SWAMP protocols will be followed. Provision C.8.h will be updated to allow reporting in CEDEN format.

C.8.c. San Francisco Estuary Receiving Water Monitoring: RWQCB and BASMAA agree that no changes to C.8.c are needed.

C.8.d. Creek Status Monitoring: RWQCB agreed with BASMAA's proposal for a "Watershed Assessment" approach to Creek Status Monitoring. Several possible aspects of the new approach were discussed. Details (e.g., Management Questions, toolbox of monitoring types, level-of-effort, follow-up) will need to be decided upon.

- BASMAA would like to see monitoring efforts reduced or stay cost neutral.
- **MRP 1.0/2.0 Findings**: Through bioassessment surveys, this provision measures ambient conditions and addresses multiple factors in a watershed. We now have a good idea of "baseline creek status" on regional and countywide scales and important stressors driving index scores (i.e., imperviousness). (See BASMAA 5-Year Bioassessment Report and Factsheet).
    - The probabilistic design was helpful in identifying ambient conditions; however, it had the unintended consequence of losing local interest and site-specific relevance. A targeted or watershed-based design should be considered for MRP 3.
- **MRP 1.0/2.0 Comments**: Creek Status Monitoring is valuable to show the public how creeks are doing; however, the connection between Creek Status Monitoring and what else is being done for permit compliance (e.g., GSI, PCBs controls, C.3 measures) is complicated. Creek Status Monitoring data do not help site GSI or PCBs controls. Nor would Creek Status monitoring data be expected to catch episodic sources (e.g., illicit discharges) or respond quickly to GSI projects or PCBs control measures (i.e., trends).

- **MRP 3.0 Approach**: BASMAA and RWQCB staff agreed that the Creek Status Monitoring sub-provision would be changed to a watershed assessment approach at a meaningful set of creeks.
- MRP 3.0 Management Questions:
    - Are conditions in local receiving waters supportive of or likely to be supportive of beneficial uses? (MRP 2.0)
    - Are water quality objectives, both numeric and narrative, being met in local receiving waters, including creeks, rivers and tributaries? (MRP 2.0)
    - Several potential new MQs were discussed, many of which are already included in POC Monitoring and may not be appropriate for Creek Status Monitoring. There is a need to differentiate between stressors and sources. Stressors are large scale (e.g., watershed imperviousness) and sources are smaller (e.g., contaminated parcel). It may be that Creek Status Monitoring MQs should be directed at stressors.
    - ***ACTION ITEM****: Look at SCCWRP MQs prior to next meeting*
- Watersheds/creeks monitored would be selected by Programs based on:
    - current and planned management actions (including GSI)
    - areas of quality habitat – opportunity to document resources that should be protected
    - community defining features
- Although RWQCB staff would like to include specificity on which creeks will be monitored in MRP 3.0, the group recognized that creek selection will be a complicated process involving stakeholder input. *Some* creeks could be identified in MRP 3.0 with language that allows for flexibility. This would demonstrate to the public what will be fleshed out in Year 1.
- The Year 1 report would be used to define:
    - list of creeks/watersheds to be assessed during MRP 3.0
    - monitoring types to be implemented (monitoring types should be connected to management questions)
    - minimum level of effort
    - % urban/non-urban
- Annual reporting may not be needed because watershed assessments could span multiple years.
- Triggers for SSID Consideration (CSCI score, DO, specific. cond., pH, temperature). No change.
- Monitoring Types, methods, and frequency:

Parameter/Type	Method	Frequency
Stream Survey (stream walk & mapping)	Modified Unified Stream Assessment (USA), CRAM, or equivalent. A modified USA method was previously developed by BASMAA to address creek access permission issues (e.g., there are often gaps in permission along the creeks) and data needs (e.g., detailed data on each pipe/culvert is not needed).	Minimum # of stream miles to be surveyed over 5-year permit term to be based on overall stream miles in Program area or population (SC/AC/CC/SM/FSV). (TBD) Do urban miles = non-urban miles? % urban/NU effort needs to be defined
Bioassessment Surveys	Full SWAMP protocol (benthic macroinvertebrates, algae, physical habitat, nutrients) (Ode et al. 2016)	Minimum # of bioassessment surveys to be conducted over 5-year permit term (TBD). Could be based on # of creek walk miles

Temperature	Digital temperature logger or equivalent 60-minute intervals (April through September)	Minimum # of sample sites to monitor over 5-year permit term (TBD)
General Water Quality (DO, pH, specific cond.)	Multi-parameter probe 2/year (spring and late summer/fall) 15-minute intervals for 1 or 2 weeks minimum Longer deployments may be considered or short, rotating deployments Permit should allow for flexibility	Minimum # of sample sites to monitor over 5-year permit term (TBD)
Trash Visual Assessment	BASMAA Rec. Water Monitoring protocol	Conduct when Bioassessment Monitoring takes place
Fish Counts	TBD	TBD
Chlorine	Grab sample, continuous (?)	Conduct in creeks with fish kills

C.8.d.v. Pathogen Indicators: The overall need for pathogen indicator monitoring was discussed. RWQCB staff suggested that Bacteria TMDLs are already driving bacteria monitoring, but there may be a desire for focused monitoring. RWQCB staff also suggested that geometric means (based on at least five samples collected during a 6-week period) be assessed, rather than single samples. Could pathogen indicators be included in the table of monitoring types?

C.8.e. Stressor/Source Identification (SSID) Projects: SSID projects can have a high level of local interest and value even if they do not result in stormwater management actions.

- SSID projects could be used as a tool in our monitoring toolbox and/or Creek Status Monitoring could be used to support SSID projects.
- RWB staff suggest that there is no longer a need to include a toxicity project.
- The Trigger List should be maintained but SSID projects can be selected from other data sources and best professional judgement (e.g., addressing 303(d) listings or TMDLs).
- BASMAA proposed a collective total of seven SSID projects (vs. eight in MRP 2.0) which is easier to divide evenly among the Programs.
- More flexibility is needed in defining the SSID project endpoint.

C.8.f. Pollutants of Concern Monitoring: RWQCB said that the structure of this provision will stay the same; however, the current tables may be modified. We are still waiting for outcomes from the MRP 3.0 C.11/12 Workgroup to inform this sub-provision.

- Priority Management Information Needs – no change (tided to RMP MQs)
- Monitoring Methods will be revised relevant to C.11/12 requirements
- Parameters:
    - Mercury and PCBs - RWQCB agreed that these parameters could be disconnected from each other
    - Copper – RWQCB is open to considering elimination of copper; however, it could be an important marker of urbanization. Furthermore, there is some evidence that copper is creeping up in the South Bay.
        - ***ACTION ITEM****: Show Richard copper data to help support decision*.

    - Emerging Contaminants – RWQCB staff agreed that specific CECs could be eliminated to address changing decisions at the RMP. However, RWQCB staff feels that "conduct or cause to be conducted" language is too broad – more detail is needed on what will be done. Fact Sheet could summarize what is going on already. Permit should anticipate how Programs could support ongoing work.
    - Nutrients – RWQCB staff agreed to eliminate this parameter. The purpose of the monitoring (NMS) is no longer relevant.
- Minimum Number of Samples and Annual Samples – BASMAA suggested eliminating annual minimums and/or ending the annual requirement after the total minimum is completed. The idea is to avoid costly annual mobilization and provide for more flexibility. RWQCB staff are reluctant to abandon annual minimums to ensure accountability. One option is to map out the POC monitoring design for the entire permit term in advance and stick to that plan with accountability.
    - ***ACTION ITEM****: Make a proposal for what Table 8.2 would look like in MRP 3.0. Accountability is a priority*.

C.8.g. Pesticides and Toxicity Monitoring: There will be a state program, but the details are in development and the implementation mechanism is still unknown.

C.8.h. Reporting: The group did not have to time to discuss all of the BASMAA ideas included in the Matrix. However, several reporting options were discussed, including ideas for annual report content (e.g., watershed assessments conducted over multiple years may not lend themselves to annual reports).

- It was agreed that EDD submittals will be changed from SWAMP to CEDEN format.
- RWQCB staff agreed that the Oct 15th POC report could be folded into UCMR (or submitted concurrently).

***ACTION ITEMS*:**

- ✓ *Identify Management Questions for Creek Status Monitoring and how monitoring types could address the MQs. Look up SCCWRP MQs for ideas.*
- ✓ *Flesh out concept of Creek Status Monitoring Year 1 Report (planning report). Identify what goes into report.*
- ✓ *Provide Richard with copper data to help support decision-making regarding how this parameter should be addressed*.
- ✓ *Make a proposal for what Table 8.2 would look like in MRP 3.0. Accountability is a priority*.