MRP 3.0 C.8 Water Quality Monitoring Workgroup (INTERNAL)
FINAL Meeting Summary
Monday, October 29,, 2019
9:30 am – 12:00 pm
EOA, Oakland

Attendees:
Bonnie de Berry (BASMAA facilitator, EOA)
Jim Scanlin (ACCWP)
Craig Pon (ACCWP, City of Oakland
Lucile Paquette (CCCWP, City of Walnut Creek)
Mojgan Rahimi (CCCWP, City of Walnut Creek)
Michele Mancuso (CCCWP, Contra Costa County, phone)
Khalil Abusaba (CCCWP, Wood)
Reid Bogert (SMCWPPP)
Chris Sommers (SCVURPPP, EOA)
Paul Randall (SCVURPPP, EOA)
Simret Yigzaw (SCUVRPPP, City of San Jose)
James Downing (SCVURPPP, Valley Water, phone)
Amy King (FSURMP, Solano County RCD)

Overall Meeting Objectives:

1. Identify specific elements of Creek Status Monitoring (C.8.d) under MRP 3.0.
    a. Agree on Management Questions
    b. Identify selection criteria for watersheds/creeks for monitoring during MRP 3.0
    c. Identify Year 1 Report elements
2. Develop a new proposed POC Monitoring Requirement table that would replace Table 8.2 from MRP 2.0. (THE GROUP AGREED TO HANDLE THIS ITEM VIA EMAIL, ***ACTION***: CHRIS VOLUNTEERED TO DEVELOP A DRAFT TABLE BY NOVEMBER 6.)

Summary:
The group focused the discussion on the three Creek Status Monitoring objectives (Management Questions, watershed selection criteria, and Year 1 Report elements) and identified preliminary level-of-effort suggestions for the various monitoring types.

The discussion was based on prior agreements that Creek Status Monitoring would shift from a probabilistic design to a targeted Watershed Assessment approach.

Management Questions:
All agreed to keep the existing Management Questions:

- *Are conditions in local receiving waters supportive of or likely to be supportive of beneficial uses?*

- *Are water quality objectives, both numeric and narrative, being met in local receiving waters, including creeks, rivers and tributaries?*

The goal is to have Management Questions that are general enough to provide flexibility. It is also recognized that the beneficial uses being addressed are usually those that are presumptively applied to all creeks in the region (WARM and REC-1). Creek Status Monitoring is directed towards *stressors* which are large scale (e.g., watershed imperviousness) rather than *sources* which are smaller in scale (e.g., contaminated parcels).

Programs can imbed sub-questions that help direct monitoring approaches in their Year 1 Reports/Workplans. Examples of sub-questions might include (but are not limited to):

- Where are the highest value resources?
- Are there trends in receiving water conditions in specific locations (e.g., valuable parks, downstream of management actions?)

Watershed/Creek Selection Criteria:

The group agreed that the population of watersheds/creeks from which MRP 3.0 Creek Status Monitoring targets would be selected may include all creeks in the region. Watersheds/creeks monitored could be selected by Programs based on (but not limited to):

- Current and planned management actions (including GSI)
- Areas of quality habitat – opportunity to document resources that should be protected
- Community defining features
- Trigger table
- "Areas of unique importance" (i.e., where there is stakeholder interest)
- Known water quality concerns (illicit discharges, complaints, 13267 letters, 303d listings, POCs)
- Data/information gaps

Year 1 Report Elements:

- 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
- Schedule

The group agreed that the Permit should be prescriptive enough in terms of monitoring type, duration, and frequency that the Year 1 Reports will not require approval.

Table of Monitoring Types:

CCCWP reviewed the table imbedded in the C.8 Matrix and proposed a minimum level-of-effort. The group also added and eliminated some monitoring types.

The level-of-effort in the table below assumes a five-year permit term with effort not necessarily applied on an annual basis (i.e., no annual minimums). However, the group acknowledged that the Permit will likely extend beyond five years. Should there be an annual minimum applied after the fifth year? Could Programs gamble an assumption of more than five years and include higher levels-of-effort in their Year 1 Workplans, thereby eliminating the need to monitor in Year 6, Year 7, of the Permit?

ACTION: Develop language to avoid having the Permit list annual minimum numbers of samples.

Parameter/Type	Method	Frequency
Stream Survey (stream walk & mapping)	***Modified*** Unified Stream Assessment (USA) (x-miles) or CRAM (x-miles) 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**) **60% of stream miles assessed should be "urban" (using current definition from probabilistic Master List)**
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. **50/25/5 sites over permit term (half of current)**
Temperature	Digital temperature logger or equivalent 60-minute intervals (April through September)	Minimum # of sample sites to monitor over 5-year permit term **20/10/2 over permit term**
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 **40/20/8 weeks of monitoring over permit term**
Trash Visual Assessment	BASMAA Rec. Water Monitoring protocol (Qualitative) **Assumes no other trash receiving water monitoring will be included in C.8 or C.10**	Conduct when Bioassessment Monitoring takes place? **50/25/5 sites over permit term, but not necessarily with bioassessment or at currently assessed sites (desire to have flexibility in selecting sites)**
Fish Counts	Fish counts might be an important tool in some creeks. Could be conducted in lieu of some other monitoring type. This option might be included as a footnote in the table.	
Chlorine	Chlorine monitoring might be an important tool in creeks with fish kills. Could be conducted in lieu of some other monitoring type. This option might be included as a footnote in the table. ***ACTION***: CCCWP will propose language for chlorine monitoring.	

Desktop studies/mapping	This may not be a monitoring type but could instead be added as a new sub-provision. Other parameters are reduced to free up budget for this "monitoring type." There may be some overlap with tracking and communication of GI and other POC control measures Could help with prioritization and other drivers for GI Is this a sub-provision under C.8? or should it go in reporting? ***ACTION***: Someone needs to volunteer to flesh this out with bullets (CCCWP)	NEED VOLUNTEER TO DESCRIBE THIS TYPE OF "MONITORING"

***ACTION ITEMS*:**

- ✓ *Chris will develop a draft Table 8.2 by November 6.*
- ✓ *Develop language to avoid having the Permit list annual minimum numbers of Creek Status Monitoring samples/surveys. Language may also apply to POC Monitoring by November 6.*
- ✓ *CCCWP will propose language for chlorine monitoring by November 6*.
- ✓ *CCCWP will propose a means of including desktop studies/mapping into C.8 or some other provision to justify reducing Creek Status Monitoring level of field sampling effort from MRP 2.0. (November 6 deadline)*.