DRAFT MEETING SUMMARY

Date: May 18, 2020 9:00 AM – 12:00 PM
Location: Online Meeting
Subject: Regional Compliance for a Sustainable Bay Advisory Committee Meeting #1
Attendees:

Advisory Committee:	***In Attendance (Yes/No)***
Shannan Young, City of Dublin, ACCWP	Yes
Kristin Hathaway, City of Oakland, ACCWP	Yes
Karin Graves, CCCWP	No
Frank Kennedy, Kennedy & Associates, CCCWP	Yes
Matt Fabry, SMCWPPP	Yes
James O'Connell, City of Redwood City, SMCWPPP	Yes
Rinta Perkins, City of Santa Clara, SCVURPPP	Yes
Pam Boyle Rodriguez, City of Palo Alto, SCVURPPP	No
Kevin Cullen, Fairfield-Suisun	No
Rob Carson, MCSTOPPP	Yes
Jamison Crosby, Napa County Stormwater Management Program	Yes
Sarah Minick, SFPUC	Yes
Oriana Hart, County of Sonoma	Yes
Angela Clapp, Port of Oakland	Yes
Hardeep Takhar, Caltrans	No
Wilfung Martono, Caltrans	Yes
Steering Committee:	
Amanda Booth, City of San Pablo	Yes
Sarah Kolarik, City of San Pablo	Yes
Joanne Le, City of Richmond	Yes
Steve Waymire, City of Walnut Creek	Yes
Lucile Paquette, City of Walnut Creek	Yes

Michele Mancuso, Contra Costa County	Yes
Project Consultant Team:	
Lisa Austin, Geosyntec	Yes
Kelly Havens, Geosyntec	Yes
Amy Smith, Geosyntec	Yes
Mark Kieser, Kieser & Associates	Yes
David Chen, Kieser & Associates	Yes

Meeting Summary

1. Introductions

Brief overview of meeting format and agenda provided by Kelly Havens.

2. Project Objectives, Schedule, and AC Role

Amanda Booth provided an overview of the project, the AC Role, the meeting schedule, and the objective of the meeting.

3. Project Workshop Discussion

The questions asked during the Workshops held the previous week (May 12 and 14) were provided to the AC. AC was asked for input regarding questions as well as general input from the Workshop. No comments were provided; decision was made to move to a detailed overview of the "metric" in agenda item #4 and discuss Workshop feedback if it was pertinent to the discussion.

4. Presentation of TAC Meeting #1 – Metrics

Mark Kieser gave an overview of additional important details relating to the metric decision. The metric must include linkage to the regulatory driver; be a measurable outcome of an alternative control implemented; allow for equivalency calculations between a project; transparency in terms of clarity with what the metric is, how it is calculated, being clear for public is important for the System; and provide a clear link to pricing. Prices and clarity are important – sometimes metrics based on multiple benefits are too confounding and end up undermining the program. ***Key discussion points:***

Drivers and Cost Effectiveness: Sarah Minick – is cost effectiveness the main driver?

- Amanda Booth – We want to cost-effectively meet the TMDL, but permit compliance is also important. We could ideally strategically locate facilities to provide better water quality benefits.
- Rinta Perkins (chat) - Yes, I agree, From the developer's perspective - it all comes down to cost analysis to construct on-site v. off-site. But at what point we need to bring in this cost analysis into the pricing within the system metric.
- Mark – Cost is the underpinning. There may be opportunities to implement expensive control measures that don't achieve as good water quality, but the System will tend to more cost-effective implementation of control measures. Metric will drive control measure which will drive cost.
- Matt Fabry – It seems there are multiple drivers, suggest we be as forward-looking as possible when establishing metric. PCBs are important now, but there may be more important water quality or other factors in the future. Soils in Bay Area make it harder for a retention standard, could use volume managed or removed instead. Think a volume approach could provide more flexibility in the future and connects better to climate change and resiliency drivers that may be more important in the future. Thinking of the quality of the credit that is being traded, GSI may be providing additional benefits, can account for additional multi-benefits through pricing.
- Sarah M. – Suggest that volume be used with multipliers. A dirtier location could provide higher pricing if scaled by land use.

Stacking vs. Bundling: Mark provided an overview of "stacking" versus "bundling" of credits or unit of metric.

- For "stacking", all PCBs load reductions from an example site are creditable AND all acres-greened from the same site are creditable.
- For "bundling", only one metric is creditable for any treated portion of an example site. This could be applied in the following ways for an example site:
    - Option 1: All of the acres-greened receive credit but NONE of the associated PCBs load reduction receive a credit or
    - Option 2: All of the PCBs load reductions receive a credit but NONE of the associated acres-greened receive a credit
    - Option 3: Half of the acres-greened receives credit and the other half receives PCBs load reduction credits;
- For either approach, adaptive management is important. New science can be integrated into the system every five years, not retrospective, but going forward adjust the value.

Scaling: Mark also provided an overview of "scaling" – whether one metric or multiple metrics, the scaling speaks to the unintended consequences associated with that metric. An example is a Program that gives 1.1 as the multiplier for a project benefitting wildlife (extra 10% of additional

benefit). When it comes to uncertainty, scaling can lead to market issues. If you are "discounting" credits to account for uncertainty, you can increase the price substantially.

Stacking vs. Bundling: Lisa Austin (chat) - I don't see when we would ever want to separate acres greened from pollutant load reduction at least until the TMDLs are met (especially with mercury). Even if a private developer is a buyer, the MS4 that the buyer is located in will want to take the load reduction credit.

- Mark – If you are trying to track all benefits, you could track each benefit individually, and these different markets could unfold later. It may be that there is only one that ever has market demand, could be that some markets come up later.
- Steve Waymire (chat) – The Cities have no money to pay for TMDLs. The money is with the development community, who do not have TMDLs assigned to them, just C3.

Metric Selection: Participants suggest that a metric that is a proxy for all the things that everyone wants be selected, keep it simple and think about "real world examples", including likely buyers.

Amanda Booth and Kelly Havens provided a verbal summary of the TAC meeting that took place on May 13, 2020. Full notes will be available once reviewed by the TAC. Only critical indication is that the metric/system should clearly demonstrate a "net environmental benefit."

5. Regional Compliance System Metrics Discussion

Amanda Booth and Kelly Havens presented a brainstorming matrix looking at different considerations for metric, including components such as control measure, buyer/seller, exchange baseline, calculation method, potential scaling factors for consideration, etc. AC provided feedback on format of matrix, which has been incorporated into preliminary draft matrix attached to the notes. ***Key discussion points:***

Exchange Baseline: Sarah M. – With regard to exchange baseline – could be some sites to drive the market, could be some sites that are disallowed from participating.

- Amanda – Maybe not disallow, but make those sites ineffective from a cost perspective.

Climate Change Resiliency: Group discussion that resiliency is an important component. Suggestion to apply FEMA flood map or SFEI Adaptation Atlas to categorize areas.

- Matt (chat) – My sense is that for climate adaptation, agencies might be applying a new design standard to Stormwater management that differs from C.3 wq-based sizing. This increased standard on development would help drive credit markets.

Volume Managed: Participants discussed whether volume could be used as proxy for other loads reduced. Two potential concerns were raised: this could leave out source control measures; and there are considerations with regard to "equivalent pollutant loading" as well as differences in control measure performance relating to pollutant removal based on type and design (i.e., average annual capture; pollutant removal not linear with percent capture). Participants suggested that volume metric seems to lean toward permit compliance rather than PCBs TMDL.

Net Environmental Benefits: Participants discussed "net environmental benefit". Is RWB looking primarily at pollutant removal? Amanda – RWB potentially looking at a very wide range. What needs to be sure is that System produces something that the NGOs are not challenging. That's why equity could be a very good scale to provide some more comfort for NGOs. One caveat is that we don't necessarily want to set precedent with the definition of "net environmental benefit".

Multiple Metrics: Kristin Hathaway (chat) – Are there already other established markets who are doing successful trading of multiple metrics? It seems very complicated to do well.

- Mark – Chesapeake Bay has multiple metrics – they calculate and track associated load reductions with whatever is put in place. They are calculating water quality benefits, quantity benefits, two different computational methods. All being done behind the scenes, so long as the program is being approved, simple on the face, can more complex behind the scenes.
- Sarah K. – behind the scenes, what could be useful would be to have a GIS-based calculator and get metrics that are spit out. Could make a complicated metric calculation easier to understand by the end-user. Could apply Cal Enviroscreen or FEMA flood map, other geospatial factors.

Buyer Interest/Cost Considerations: Steve – Do we even think that a 1:1 ratio and adding O&M, that this System could be successful. From the developer interest. Are we doing something that they aren't even interested in?

- Sarah M. – SFPUC has been thinking about this. Did some informal polling, what they found is that developers were interested for different reasons. If the price point was perceived to be lower than their onsite costs, then yes, but this is perception based because they are not really aware of the actual costs onsite. Time savings from being able to just buy a credit was also of interest.
- Amanda – San Pablo has dealt with sites where did not allow to do special projects. Because of that they pulled project from the site because they couldn't build number of units they wanted to build on the site. Also have certain parcels where we don't want infiltration.

- Matt – Other programs he's looked into have been rolled out with a ceiling and a floor, with the ceiling being an in-lieu fee, below that is the credit market that is becoming robust with a lot of opportunities. Functional on the seller and no liability on the buyer, they have certainty that credits achieve the WQ benefits. Can do some things without a revenue stream, but need a revenue stream ultimately. Could be simplistic scaling things to get things done in certain areas, keeping it simple to make it appealing to developers.
- Kristin (chat) – Echoing what others have said, it seems that developers would likely be interested in this kind of option not only because of cost savings or cost comparability but because of alleviating the long-term O&M responsibility. It lessens a permittees responsibility to run an inspection program and ideally creates an economies of scale O&M.

Metric Poll: At this point in discussion, a Zoom poll was provided asking "Please indicate the metric you think would be most beneficial for the program?" Results are below:

Metric	**Count of Responses**
Volume Treated/Managed	10
"Acres Greened"/ Acres Treated	6
PCBs Load Reduced	1
Other (please chat)	1

Other: "I think there would be the most overall benefit from a stacked version of PCB and Volume treated similar to Mark's earlier slide."

- Majority of participants leaning toward volume. Facilitators requested some input from those who selected "acres greened"/acres treated as their selection. Input on this provided:
  - Michele Mancuso – acres treated seems more concrete and understandable than volume, could apply to trash and other factors.
  - Steve – Have to agree with acres treated concept – will make it simple and easier, consistent with what we've done in the past.
  - Kristin (chat) – The driver for us is always what's in the permit so if acres greened becomes one of the new requirements that will be a significant factor.
- Group discussion on "acres greened" (or impervious acres greened) demonstrated that this needs to be defined. It has been discussed as the C.3.j metric but is undefined. Suggest getting RWB input; there is some trepidation as they may ask permittees to define. Participants agreed that "acres greened" may indicate a narrower set of control measures.
- Participants suggested that "acres treated" may allow for more opportunities for different types of control measures as well as buyers, and may be more clear. Discussion that non-GSI control measures are not necessarily accepted by RWB.

- Participants discussed that "acres treated" and "volume managed" could easily be converted from one to the other. Volume managed may allow for smaller units.
- AC members supporting a volume-based metric cited that a volume-based metric may be more comprehensive and therefore may be more inclusive and useful for quantifying different benefits and different project types.

Life Cycle/ O&M: Participants also had a chat-based discussion on control measure life-cycle. Sarah M. indicated that in SF they are proposing to incorporate the maintenance costs into the fee in lieu at the rate of $154k per impervious acre managed based on 50 year life cycle.

- Amanda - An interesting question that we will need to discuss at some point is "how long is lifecycle" depending on the control measure.
- Matt (chat) – O&M needs to be discussed at some point for credit pricing, but theoretically, a credit generator can use the ongoing fees to pay for O&M. This is assuming a credit for a period (like DC's 3 years) that have to either be purchased annually or negotiated between buyer/seller for a lump payment or some other system.

6. Summary of Key Discussion; Next Steps

Kelly provided a summary of next steps: AC will receive notes for review, will have two weeks to provide comment on notes or other follow-up comments before finalizing.

Meeting Action Items:

1. Will provide "Cross-Cut Analysis" and Working Draft Glossary to AC – by May 26
2. Will provide draft metric matrix to AC – by May 26
3. Define key metrics (with assumptions): acres treated, volume managed, acres greened (last with input from RWB) – Draft by Next AC Meeting (June 16)
4. Define "net environmental benefit" and "equivalent pollutant load reduction" – Draft by Next AC Meeting (June 16)
5. Develop scenarios to look at calculation results for different metric types – Draft by Next AC Meeting (June 16)

Next Steps for Project:

1. TAC Meeting #2 – discussion of System Approach – June 15
2. AC Meeting #2 – June 16
3. Draft Literature Review – July