

DRAFT MEETING SUMMARY

Date: May 13, 2020, 9:00 AM – 12:00 PM
Location: Online Meeting
Subject: Regional Compliance for a Sustainable Bay TAC Meeting #1:
Regional Compliance Metrics
Attendees: Amanda Booth, Sarah Kolarik, *City of San Pablo*
Joanne Le, *City of Richmond*
Michele Mancuso, *Contra Costa County*
Steve Waymire, Lucile Paquette, Cathleen Terentieff, *City of Walnut Creek*
Derek Beauduy, Zach Rokeach, *San Francisco Bay Regional Water Quality Control Board*
Luisa Valiela, Jacques Landy, *EPA*
Tony Hale, Gemma Shusterman, *SFEI*
Kelly Havens, Lisa Austin, *Geosyntec Consultants*
Mark Kieser, David Chen, *Kieser & Associates*
Jill Bicknell, *EOA*
George Kelly, *Bespoke Mitigation Partners*

Meeting Summary:

1. Introductions

Attendees introduced themselves on the line; Kelly Havens provided an overview of the agenda. No questions or comments on the agenda. Luisa Valiela asked a question regarding how TAC meetings are recorded; TAC meeting notes are prepared by the Project Team following the meetings and shared with the TAC for review and comment.

2. Project Overview and TAC Role

Amanda Booth provided an overview of the project and timeline. Amanda provided an introduction of TAC roles and schedule for TAC meetings. No questions or comments.

3. Alternative Compliance Metric

Mark Kieser provided a presentation to describe considerations for the unit of metric selection for the Regional Alternative Compliance System. Key presentation points:

- Clear identification of the metric early on is key as it drives many of the system considerations
- The metric is an expression of the water quality benefit or the pollution discharge reduction metric. It has to be a measurable unit.
- Equivalency between sources may need to be considered for metric; want to make sure the exchange between two sources is equivalent. If there is a disparity, you could be dealing with a trading ratio or other discounting factors.

- For all programs, transparency is key, this feeds into everyone's perception of the System
- Pricing - The more straightforward the metric, the easier it is to relate the price of the control to the metric.
- Simplicity – it is critical to be able to quantify without a lot of standard deviations

Discussion Highlights:

- Tony Hale - Mark, often implicit within load reductions is an associated/proportional reduction in potential impact. In terms of equivalency, is there also a consideration for equivalency of impact – e.g., localized methylmercury impacts on wildlife in one subregion of the Bay versus another?
- Steve Waymire – are we making this complicated by thinking about TMDLs vs. C.3 trading? Developers are interested in meeting C.3.
 - Amanda – in the MRP there are two requirements that need to be met, C.3 and C.11/C.12. It is likely that we will need to develop a system that will meet both requirements because the different metrics could drive different types of development. For example, Walnut Creek might have a development project that wants to use alt. compliance. If the metric is solely based on PCBs then a developer that builds on three acres in Walnut Creek may only need to treat one acre in Richmond, if the site in Richmond yields a higher PCB load. In this example we would meet the PCB requirement but not the C.3. If the metric is solely based on an acres metric the alternative compliance site could be built on a previously undeveloped site (“virgin land”) that does not provide the same PCBs, but meets the C.3 requirement. We don't want to develop a system that promotes development in green fields but we also don't want to just have “greened acres” in the old industrial areas.
 - Mark – a decision now will affect where we are in a few months. Input now is extremely valuable. Need to tease out what our purpose and goal is and how to achieve those. How do we address this challenge of competing metrics?
- Mark provided an overview of stacking vs. bundling: stacking means that the credit for the different metrics can be sold separately, vs. bundling, which means that the credits for a project must stay together.
 - Lisa – if greened acres is our C.3 metric that is a surrogate for C.11/C.12 load reduction, then we might have to bundle.
 - Lucile – TMDL load reductions are more important driver. Not all control measures are the same. GSI “acres greened” are not equivalent. Need more of a ramping or range to make this work.

4. Bay Area Context/Considerations

Jill Bicknell and Lisa Austin provided an overview of where we are with MRP Provisions C.3 and C.11/12, respectively, along with mercury and PCBs TMDLs.

Jill provided some considerations for MRP 3 discussions for C.3:

- Challenges with “acres greened” metric:
 - How is “greened” specifically defined?
 - Does it require a particular drainage area (e.g., size, land use, other factors)?
 - Does it require a specific control measure, or do all control measures “green”?
 - Could resonate with the public but potentially not specific enough for this system

5. Key Definitions/Decisions

Kelly provided overview of agenda package handouts and introduced brainstorming session. The full brainstorming discussion is provided below as a summary:

Key Points and Next Steps:

- There was general consensus that there needs to be more definition around “greened acres” and what the intended water quality benefits/metrics are behind this term.
 - Need to get feedback from Keith. Specific questions voiced in the meeting included:
 - Definition around “greened” acres
 - Is future purchasing allowable?
 - What types of control measures are included?
- EPA and RWB emphasized that they do not have a pre-conceived notion on what the alternative compliance system should look like. Regulators emphasized that they do want to build this collaboratively and stated approval for the system to:
 - Incentivize most cost-effective water quality benefits for the Bay
 - Appropriately value and provide real water quality benefits
 - Be general and as inclusive as possible for multi-benefits and potential buyers/sellers
 - Be as simple as appropriate to avoid discouraging potential participation
- Participants voiced feedback for how to encourage, not discourage buyer/seller participation and program success including:
 - Making the program as simple as possible
 - An ideal program would allow developers to have the certainty that they can meet their needs with one simple payment
 - Trying to harmonize benefits to drive supply
- Feedback from the group seems to reflect that the consensus is gravitating towards having a metric for the system, potentially in addition to or in place of PCBs load reduction, that could address the “greened” acres requirements. PCBs load reduction alone seems to be too narrow.
 - Next steps could examine what this metric may be, comparing metrics such as area treated, volume treated, etc.
 - Members noted that this type of metric will inherently have to address equivalency from location to location and will likely have to deal with the uncertainty and added complexity associated with mechanisms used to

- address equivalency (i.e., discounting factors, land use, control measures, etc.)
- Comment noted that this metric does not have to be identical to the metric in C.3.j
- Discussions still needed regarding whether these metrics will be treated as two completely separate markets or bundled.

Subsequent feedback from the Regional Water Quality Control Board (Derek Beauduy) provided during review of these TAC meeting notes (on 6/4/20) are summarized below:

1. “Water Board staff sees “greening” an acre as installing and properly operating and maintaining an appropriately sized LID stormwater treatment control that treats an acre of previously untreated impervious surface.

As discussed during the TAC meeting, typical pollutant loading based on land use needs to be taken into account to determine equivalency/credit for this program. Further discussion needed regarding non-LID treatment controls.”

2. In response to “Is future purchasing allowable?”: “Likely yes. The current MRP requires offsite and regional alternative compliance projects to be completed within 3 years of the Regulated Project construction completion (and up to 5 years with prior Executive Officer approval). This would lend itself to the concept of future purchasing. There is risk of the alternative compliance project not getting built though, and we need further discussion of what happens in that circumstance.”
3. “We would expect the baseline control measure to be an LID control installed to treat impervious surface/ “green acres.” As discussed in the meeting, other actions such as street sweeping for PCBs control or installation of non-LID treatment controls may be an option but also may be more difficult to determine credit or equivalency and require a different metric. Water Board staff feels further discussion is needed before coming to a conclusion on non-LID controls as alternative compliance.”
4. Relating to the concept of “bundling”: “Water Board concurs – we haven’t fully thought this through and more discussion is needed on stacking vs. bundling. Would be helpful to understand how it’s been done in other programs.”

Full Discussion

- Lucile – what does “greened” mean? Suggest we don’t disallow “non-green” treatment. What if we ranked the type of land that is being greened so that a smaller area of old industrial is equivalent to a larger area in old urban or new urban?
- Amanda – is there another metric that we should be discussing that could be a surrogate for greened acres or loads reduced?
- Sarah – thinking about the ranking of green acres, would that be related to area already greened, which would make more greened acres less valuable. What is the point of greened acres? If infiltration is the goal, then volume infiltrated could be the metric.
- Kelly – infiltration is difficult in the Bay Area.
- Lisa – goes back to Mark’s process slide on first defining what we are trying to achieve. Volume captured doesn’t promote the inclusion of source control measures, like enhanced O&M, for PCBs loads reduced.
- Steve – We have to put together a system that will attract the developers, including smaller developers that are putting in small C.3 basins. There is a chance to take projects in Walnut Creek and put that treatment where it will be effective. Currently this is too complicated.
- Jill – agree with Steve. One way to make acres greened more specific and useful is “impervious area treated”. Secondary benefit would be where the area is located, and the pollutant load reduction associated with it. The treatment should include LID and non-LID treatment.
- Kelly – Going back to the stacking slide. Depending on the buyer, different metrics are going to be more valuable. If you have two different groups of buyers, how does it work?
 - Mark – what is the compliance requirement that is trying to be met? There may be a whole suite of projects that could be implemented. You could have two funding streams; simplicity of tracking is key.
- Derek – RWQCB wants to be flexible. [It seems that we are] getting towards two metrics. For example, if we have a project that needs to treat 3 acres and can be done somewhere else, what needs to be answered is a typical pollutant loading question between project and alternative control measure to demonstrate equivalence. A definition of “greened acres” is under discussion, will follow-up with Keith to be clear. He agrees with the simplicity part of it to attract developers. We need to create within this structure a simplicity but need to account for the land use pollutant load differences. What would make developers want to participate in the program?
- Jill - Even though we’ve had this alternative compliance option for a couple of permit terms, there are very few developers that take advantage of it. It is difficult to find an off-site location and design and build there. Developer would really like a way to just pay for credits.
- Steve – A developer wants to make one payment so they can make the value on their property and walk away.

- Derek - Is that what we are striving to do here? Trying to get to a point where it's just a transaction that takes place, and we are just working on the details right now? RWB doesn't want to make this more complicated than that.
- Amanda – Yes, one purpose is to facilitate development on constrained sites. Question – can we purchase credits before they are built? Need RWB input on this. What constraints need to be around that. Who would be a buyer for PCBs in the current permit? Could there be a scenario where we have 3 acres in Walnut Creek and they can't or don't want to do GSI on their site, they purchase into a project in the City of Richmond that also has load reduction. If the 3 acres in Richmond is generating PCBs, could they sell some PCBs to one buyer and some to another?
- Luisa – want to close out the regulatory viewpoint. EPA has no preconceived notion of what this should be. We don't have the answers, will participate in the development, so nothing will be developed that won't be acceptable.
- Mark – in response to Amanda, it is like a check book, account income and expenditures and balance at the end of the month. Amanda's scenario is feasible, it is just a commodity that you are selling.
- Cathleen – We see that it is really costly to implement C.3 for some projects. The dollar cost for the WQ benefit could be better spent elsewhere. To have a program where the developer money could be put into a water quality project is much more beneficial. Question: the hypothetical project in Richmond - would it need to meet C.3?
- Amanda – If the project was required to have C.3, yes. It could also be a voluntary project.
- Lisa – Is there a situation where the buyer and seller are the permittees? Could you have a private entity making a bank to make credits available relating to load reduction? Do we want to just focus on a simple metric and system that is really focused on redevelopment, or do we want to keep it flexible enough to facilitate pollutant load trading?
- Mark – Lots of ways these exchanges could happen. A few programs were designed to be very narrow and ultimately excluded a number of entities. Flexibility and avoiding constraints now is important.
- Luisa (chat) - I like the thought that the program could be used for C.3 and C.11-12 purposes-- as Mark is saying the combo might make the program stronger over the longer term- but if it makes it more complicated at start up, we have to consider level of effort in design.
- Jill (chat) - I think it would be valuable to have a program that addresses both C3 and C11/12 but we might want to think about limiting the control measures to the type that could be easily measured, i.e., not include programmatic elements like enhanced O&M.
- Lucile – you could combine volume treated and “urban value”, would allow for a menu. Value for each control measure and purchase according to your menu.
- Lisa (chat) - I like "area treated" as the metric. "Volume" assumes water captured.
- Mark – Volume is the ‘ideal’ of how to link the metrics, problem with volume is that it assumes water is involved. How do you do this in advance – if Richmond needed more

street sweeping and WC was paying into a fee-in-lieu program, then that could happen up front. Needs regulatory buy-in.

- Lisa Austin - Likes area treated. Don't believe we have to have the metric for the System be the exact same metric for C.3.j; could be converted.
- Lucile (chat) - agreed
- Amanda (chat) – Does "area treated" assume that mechanical treatment is the same as "green" infrastructure? If so is that ok?
- Joanne (chat) – That is under the assumption that special project option remains in the next permit term?
- Jill (chat) – Does it assume that street sweeping of an area is also “area treated”? I think it is harder to demonstrate that a programmatic control measure is generating long term credit than an installed facility that is properly maintained.
- Kelly – since all areas and methods of treatment are not equal, then equivalent pricing could be an issue.
- Mark – every time you add a conversion factor, you add uncertainty to the result.
- Michele – You could have a standard price per credit, but you could have additional credits for certain factors.
- Kelly – This might be like a scaling?
- Lucile (chat) – Value is related to land use yield, and to new development and there is a range, correct?
- Lisa (chat) - Yes, value should be relative to land use yield
- Mark – system would incorporate discounts for uncertainty in environmental outcome, which drives down the value of the credits. Price setting is OK if just municipalities are doing it, but when the private sector is involved, it gets tough. The value of land is so variable. Michele's question – value will differ from WC to Richmond.
- Amanda – fundamental issue with difference in pollutant loads from different areas. There seems to be three options we are discussing:
 - Acres treated.
 - Grams of PCBs removed per year.
 - Some sort of combined options that involves stacking, where there may be more buyers/sellers for greened acres than PCBs.
- Lisa – we automatically get credit for acres treated; could have factors related to the treatment method and location factors (soil type and land use, for example). We can calculate this using RAA.
- Tony (chat) - Lisa mentioned SFEI tools. She is correct re SFEI model generation. Furthermore, we do have a tool that calculates projected PCB and Hg captured on the basis of specific geography, GSI type, and area treated.
- Zach (chat) - Will we look into how to compare the WQ benefit of acres treated in one area vs another, and depending on the answer to that question for each "exchange" that takes

place, whether to treat more/less acres? **how many extra acres need to be treated when you go from a dirty place to a less dirty place?

- Jill (chat) - The way the permit is written now, you still need to consider the volume of runoff treated, so you would need to treat at least the same number of acres offsite. But you may get more credit for PCB loads reduced from a “dirtier” place.
- George Kelly – Let science and regulation tell us the metric. Once that is set up, the market will tell you what the value is. It is important that in a market dynamic the market will go towards the optimal solution. Then the policy needs to answer stacking vs. bundling. Harmonization is key to incentivize participation.
- Derek – what we want to see is as much water quality improvement or beneficial projects that can be encouraged by the program. Agrees with George’s comment.
- Zach - Will we talk about the idea of when a trade happens, how can we assure that where a control is being built, the overall environmental benefit is comparable to the original site where it is not being built, and how would you have to scale what you do end up building in that offsite location?
- Lucile (chat) - could someone address how this program can benefit the built out old urban area with no PCBs, other than just purchasing a solution? maybe it doesn't?
- Amanda - We want to make sure that people understand what the equivalency is. If we decide to go down the acres treated path, do we need to take into consideration the number of acres and PCBs, and soil type, and control measures, etc. and how that affects that? This could really complicate how things are measured or modeled if we are moving away from PCBs being the main metric or goal.
- Derek – need to think about the HM implications of a project in various locations as well. Broad range of impacts to be considered, not just PCBs. We want to create as broad of a program to allow the benefits that might come about. Control the scope but also keep it simple
 - Mark – good point. Can you trade away everything or are there some mandatory onsite requirements that address localized issues?
 - Amanda has not thought about the HM requirement yet.
 - Kelly – need to be consistent with C.3.e requirements.
 - Cathleen – very few of the projects in WC need to comply with HM. She was thinking that this project would not relieve projects from complying with HM.
- Zach (chat) - Thanks Amanda. One more question on this topic is, every time there's an exchange do we want to evaluate equivalency, and if not, could we avoid that by doing some kind of equivalency pre-evaluation for different counties/watersheds/etc., or is there another way?
- George – a lot of wrestling in San Diego in developing their Alternative Compliance program. The ACP draft program provides a credit that includes both pollution control and hydromodification and there are separate rules for both under the umbrella credit. This means that some credits may include both pollution control and hydromodification benefits

while others many only include one of the benefits. We should evaluate that approach to determine the application here..

6. Next Steps

- Prepare draft notes and send out.
- Develop next TAC meeting topics.
- RWB / EPA - email input anytime. Follow-up with Keith and Tom to get their input.
- Same discussion with the Advisory Committee and then bring that back to the next TAC meeting.
- Kelly will send out agenda package for next TAC meeting the week prior.