Regional Compliance for a Sustainable Bay

Workshop 1

May 2020
Introduction
• All attendees will be on mute until we open up the line for comments and questions
• To speak anytime, please click the hand icon to virtually raise your hand, and we will unmute you
• To comment or ask questions, type your question into the question bar
Web-Meeting Instructions

• We will first address questions and comments received via the web-meeting forum and then open the line to oral comments and questions

• After the meeting you may email any comments/questions to Kelly Havens (khavens@geosyntec.com) and Amanda Booth (AmandaB@sanpabloca.gov)

• This meeting will be recorded and available at:

https://www.sanpabloca.gov/2685/Regional-Alternative-Compliance
Purpose of Workshop

• Introduce the Project and Project objectives
• Summarize the capabilities and limitations of Alternative Compliance Systems
• Identify and discuss major components of Alternative Compliance Systems
• Answer stakeholder questions or concerns about Alternative Compliance Systems
Presenters

Susanne Heim
Principal, Panorama Environmental, Inc.; Facilitator for the Regional Compliance for a Sustainable Bay Project

Amanda Booth
Senior Environmental Program Analyst, City of San Pablo Environmental Services Division; Project Lead for the Regional Compliance for a Sustainable Bay Project

Kelly Havens, P.E.
Senior Engineer, Geosyntec Consultants Consultant Team Project Manager for the Regional Compliance for a Sustainable Bay Project

Mark Kieser
Senior Scientist/Principal, Kieser & Associates, LLC Specialist in water quality trading programs and policy development; Regional Alternative Compliance System Technical Advisor and Development Lead
Workshop Agenda

• Presentation (1st hour)
• Break (5 minutes)
• Focused topics (2nd hour)
  – Alternative compliance system metric
  – “Exchange” overview
  – Control measures to achieve metric
  – Certification
• Closing
• Questions and comments will be taken at the end of each focused topic discussion and after the presentation

Workshop Agenda

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<th>Discussion</th>
<th>Facilitator</th>
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<td>Introduction and Overview; Approach to Interactive Web-based Workshop</td>
<td>Susanne Hein Panorama Environmental</td>
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<td>Presentation</td>
<td>Overview of Project Objectives</td>
<td>Amanda Booth City of San Pablo</td>
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<td>Overview of Project Deliverables and Timeline</td>
<td>Kelly Havens Geosyntec Consultants</td>
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<td>Introduction to Alternative Compliance Systems</td>
<td>Mark Kieser Kieser &amp; Associates</td>
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<td>Questions on Overall Project</td>
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<td>Break</td>
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<td>Alternative Compliance System Metric</td>
<td>a. What is it?</td>
<td>Kelly Havens</td>
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<td>b. Why is it important?</td>
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<td>c. Bay Area Considerations</td>
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<td>d. Audience Comments / Feedback</td>
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<tr>
<td>“Exchange” Overview</td>
<td>a. What is “exchanged”?</td>
<td>Mark Kieser</td>
<td>15 min</td>
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<td>b. How does this work?</td>
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<td>Control Measures to Achieve Metric</td>
<td>a. What are these and why are they important?</td>
<td>Mark Kieser / Kelly Havens</td>
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<td>b. Funding / Financing of Control Measures</td>
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<td>a. What is certification and why is this important?</td>
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<td>Closing</td>
<td>Conclusion, Next Steps</td>
<td>Amanda Booth / Kelly Havens</td>
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The Workshop will be recorded and posted to the Project Website following the meeting: https://www.sonomaecoc.com/2635/ROPAMRI-Alternative-Compliance
Overview of Project Objectives
Background

PCBs load distribution in Contra Costa County per draft RAA model results
Background

Project Partners:
Main Project Objectives

- **Help** to cost effectively meet the TMDL goals
- Develop a system that “opens the door” to fund larger projects and projects that have better water quality outcomes
- Provide the opportunity for cities and counties to strategically invest in green stormwater infrastructure (and/or other measures that have water quality benefits)
- Create mechanisms for funding ongoing maintenance
- Develop a system to efficiently track and account for projects
Ancillary Benefits

• Identify and fiscally account for benefits of water quality project
• Understand and create opportunities for innovative funding mechanisms
• Address social and environmental justice issues
• Explore and learn about alternative compliance structures that currently operate in the US
Key Questions

• What is the appropriate metric for the Bay Area?
• How will the system operate? (i.e. what type of system will be created?)
• What is the approval process for a project?
• How are projects funded? (Capital and ongoing O&M)
• How are projects and exchanges tracked?
• What is the appropriate legal agreement?

All aspects above need to be legally defensible
Overview of Project Deliverables and Timeline
# Overview of Project Tasks

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**Consultant Team:**

- [Geosyntec](#) [Kieser & Associates](#) [EOA](#) [Panorama](#) [Bespoke](#)
Project Committees

• Project includes three committees:
  – Steering Committee (i.e., Project Partners)
  – Technical Advisory Committee
  – Advisory Committee
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Meetings and Workshops

• Committee meetings will be scheduled at key junctures in system development to obtain:
  – Project direction,
  – Technical input, and
  – Stakeholder considerations.

• Workshops are intended to solicit feedback from wider stakeholder audience
Literature Review

• Drivers and regulatory considerations
• Background on alternative compliance system approaches
• Key system components
• Outlines next steps for System Development

To be completed Summer 2020
System Development

**Will use** Literature Review; Project Committee Input; Workshop Feedback

**Key Components and Considerations:**

- Analyses for **metric** definition
- Definition of **eligible entities** and **geographical limits** of exchange
- **Funding/financing** of projects
- System instructions and **procedures**
- **Tracking Tool** and use instructions
System Development – Deliverables

• **Summary Report, including:**
  – Objectives and regulatory drivers
  – Summary of analyses and System decisions
  – Description of risk and uncertainty management

• **Tracking System**
  – Metric-generating project data
  – Metric and Exchange tracking
  – Project performance, i.e., O&M tracking
System Development – Deliverables (cont’d)

• Template Documents and Supporting Documents
  – MOU or interagency agreements
  – Annual Program Report Template
  – O&M Inspection Certification
  – Participant contractual language
Legal Review

• Review by **City & County Attorneys** and **Federal Clean Water Act Expert**
  – Written comments and TAC meeting
• Comments will be compiled, addressed, reviewed by project committees
• Revised Final System Documents
• The Revised Final System will be **Pilot Tested**
  – 1 to 2 projects (implemented separately)
• Pilot projects will include development of:
  – Tracking System
  – MOUs or Interagency agreements
  – O&M certification documents
• Lessons learned will be used to revise System documents
Overall Project Schedule

March 2020  

Committee Meetings and Workshops

- Literature Review
- Regional Alternative Compliance System Development
- Legal Review
- Pilot Testing

Grant Reporting

March 2020  

June 2022
Introduction to Alternative Compliance Systems
What is an Alternative Compliance System?

- Alternative compliance systems are flexible compliance programs that allow regulated dischargers to meet equivalent discharge reductions by investing in the implementation of controls at other source locations.

- The ultimate objective of an alternative compliance system is to achieve an overall environmental benefit at a reduced overall cost.
What are Examples of Alternative Compliance Systems?

- Types of Alternative Compliance approaches that are being utilized include:
  - Water Quality Trading
  - Offset Programs
  - In-lieu Fee Programs
  - Performance-based contracting and Community Public/Private Partnerships
  - Others such as Payment for Ecosystem Services and Compensatory Mitigation Banking
What is the Legal Basis for Alternative Compliance?

• Alternative compliance systems are legally enabled through existing rules, guidance, and plans (such as TMDL implementation plans)
What are the Drivers of Alternative Compliance?

- The use of alternative compliance systems are generally driven by regulatory requirements such as TMDLs, impending TMDLs, WQS/WQBELs or requirements for new development/urban growth.
Background on Alternative Compliance Systems

• In the last 25 years, many common elements of alternative compliance systems have been adapted from USEPA’s 2003 policy on water quality trading.
• This position was updated to encourage more flexibility and innovative approaches by a 2019 EPA memorandum.
Common Elements of Alternative Compliance Systems

Regardless of the type of alternative compliance approach, common elements that need to be defined in alternative compliance systems include:

- System area
- Alternative compliance metric
- Eligible entities for participation
- Approved control measures
- Baseline for generating a unit of alternative compliance metric
- Metric quantification methods
- Methods for addressing risk and uncertainty, such as through uncertainty ratios and reserve pools
- Compliance and enforcement provisions
Questions / Break
Alternative Compliance System Metric
What is the Alternative Compliance System Metric?

• Unit of water quality benefit
• Unit of pollutant discharge reduction reflecting both:
  – Regulatory pollution control requirement
  – Measurable outcome of alternative control
• Often expressed as:
  – Mass pollutant load reduction per time (e.g., kilograms/year) or
  – Measure of benefit from alternative control (e.g., “acres greened”), consistent with regulatory requirements
What is the Alternative Compliance System Metric?

- The unit generated by projects and then exchanged
- Methods to calculate metric generated must be clearly defined and consistent
Why is the Metric Designation Important?

• The metric drives the **control measures** that can be implemented to generate units of metric that are exchanged

• The metric designation may result in bounds set on:
  
  – Geographic limitations of control measure implementation
  – Parties eligible to participate
Why is the Metric Designation Important?

• Depending on the selected metric, “discounting” or scaling may be needed, depending on variables such as:
  – Control Measure
  – Exchanging Parties
  – Project Location

• The metric will set the accounting for tracking Regional compliance with key System drivers
Bay Area Considerations

- **Primary drivers of the System:**
  - Municipal Regional Stormwater Permit (MRP)
  - San Francisco Bay PCBs and Mercury TMDLs

- **Relevant provisions of the MRP include:**
  - C.3: New Development & Redevelopment
  - C.11 and C.12: Mercury and PCBs Controls
Metric Designation – Next Steps

- May 13th TAC meeting
  - Discuss options for metric and potential implications
- May 18th Advisory Committee meeting
  - Obtain input from stakeholder advisors
- Literature Review
  - Discussion of metric options and technical considerations
Audience Comments / Feedback
“Exchange” Overview
What is ‘Exchanged’?

• The unit of metric may be generated from an alternative source of control to achieve a surplus of pollution reductions beyond the compliance requirement by a “Seller”

• This surplus of credits or offsets can be “exchanged” (sold or traded) with a “Buyer” (another regulated entity) to mutually achieve required pollutant reductions
How does this work?

• Depending on the alternative compliance approach, an interested seller can:
  – construct control measures under direct contract with a buyer or others to generate credits
  – construct control measures in advance on a speculative basis anticipating a future buyer

• In either situation, control measures must meet criteria set out by the System and its stakeholders to ensure that associated water quality benefits are realized.
Eligibility Considerations

- **Potential Sellers:** MS4s, MRP permittees, industrial permittees, other NDPES permittees, agencies, private property owners, third parties, entrepreneurial credit investors

- **Potential Buyers:** MS4s, MRP permittees, industrial permittees, other NPDES permittees, agencies, developers

- **Exchange Facilitating Entities:** credit aggregators, brokers
Eligibility Considerations

• Additional considerations for eligibility may include restrictions on:

  – **Sellers:** Whether entities outside of the TMDL area may sell units of metric

  – **Buyers:** The amount of purchased units of metric that can be utilized by a buyer to meet their compliance requirements
Audience Comments / Feedback
Control Measures to Achieve Metric
What are Control Measures?

- Pollutant reducing practices implemented by eligible sellers to generate units of metric.
- Can be structural and non-structural practices accepted by regulators, including but not limited to:
  - green stormwater infrastructure (GSI)
  - source controls
  - other urban stormwater treatment measures
Why are Control Measures Important?

- Intended to generate **cost-effective pollutant load reductions**

- Types of control measures ultimately approved for the System will influence:
  - the cost of a unit of metric
  - who can participate as a “credit” generator
  - where control measures may be most cost-effective
Funding vs. Financing Control Measures

• **“Funding”** refers to where the money provided to implement, maintain and operate control measures is coming from.
  – Capital budget
  – Utility fees
  – Grants

• **“Financing”** refers to mechanisms for receiving capital or money to implement, maintain and operate the control measures, with an expectation of repayment.
  – Loan guarantees
  – Insurance
  – Incubator and venture capital
  – Private equity
Considerations for Funding and Financing Control Measures

• System development focuses first on identifying and developing funding sources (financing is secondary)

• System should accommodate and harmonize different sources of funding/financing
Control measures that can generate the identified System metric should be consistent with:

- Other regional priorities
- Regulatory drivers, including implementation of
  - Green stormwater infrastructure and/or
  - Other PCBs control measures
Considerations:

• Geographic limitations of control measure implementation
• Where to implement control measures to maximize generation of the metric (i.e., based on high pollutant loading areas)
  – Likely to be a factor in driving market-based project implementation
• How to incorporate metric-generating project implementation into other permittee plans, objectives, and/or multi-benefit projects
Audience Comments / Feedback
Certification & Verification
What is Certification & Verification?

- Certification refers to the final administrative review, documentation, tracking and approval of a unit of metric.
- Verification is the formal inspection required to confirm control measures are designed and implemented to the expectations of stakeholders.
- Certification generally conducted by a Clean Water Act (CWA)-delegated authority while verification can be undertaken by a CWA-delegated authority or third-party reviewers.
Ongoing Operation & Maintenance Certification and Verification

- With proper on-going O&M, most control measures will provide pollution reductions (and therefore generate units of metric) over the project life.
- Control measures generating units of metric will undergo periodic certification to ensure that O&M requirements are fulfilled.
O&M Failure

• A failure in the O&M of a control measure discovered during the verification process may result in the “default” of a unit of metric generated and exchanged in the System.

• Methods of managing the compliance risk associated with a default include:
  – Reserve pools
  – True-up periods
  – Correctional/contractual obligation of generators
Audience Comments / Feedback
Closing
Next Steps / Timing

1. Committees meet to discuss key decisions
   - Spring 2020

2. Finalize Literature Review
   - Summer 2020

3. Committees meet to discuss Tracking System
   - Fall 2020

4. Analysis & System Development
   - Summer 2020 - Winter 2021
Next Steps / Timing

• A second stakeholder Workshop is currently planned for 2021
• The Workshop will present System decisions including:
  – Alternative Compliance approach,
  – System metric,
  – eligible entities,
  – geographic extent,
  – tracking system, and
  – other key components.
Conclusion

• The System objective is to provide implementation flexibility for projects that cost-effectively improve water quality, achieve multiple benefits, and reduce compliance pressures for local jurisdictions.

• We are conducting a technically comprehensive process that is designed to provide many opportunities for stakeholder input.

• Project materials and meeting recording will be available at: https://www.sanpabloca.gov/2685/Regional-Alternative-Compliance

• Please send any follow up questions to: Kelly Havens (khavens@geosyntec.com) and Amanda Booth (AmandaB@sanpabloca.gov)
## Advisory Committee Members

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