

**DRAFT MEETING AGENDA**

**Date of Meeting:** June 15, 2020, 8:00 AM – 12:00 PM  
**Location:** <https://us02web.zoom.us/j/84163979664?pwd=SDNKNmUycTVUSWtPMm0yRVZRdnBjQT09>  
**Subject:** Regional Compliance for a Sustainable Bay TAC Meeting #2:  
 Regional Alternative Compliance System Approaches  
**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*  
 Keith Lichten, Derek Beauduy, Zach Rokeach, *SFBRWQCB*  
 Luisa Valiela, Jacques Landy, *EPA*  
 Tony Hale, Gemma Shusterman, *San Francisco Estuary Institute*  
 Kelly Havens, Lisa Austin, Ken Susilo, *Geosyntec Consultants*  
 Mark Kieser, David Chen, *Kieser & Associates*  
 Jill Bicknell, *EOA*  
 Susanne Heim, *Panorama Environmental*  
 George Kelly, *Bespoke Mitigation Partners*  
 Brooks Smith, *Troutman Sanders*  
 Greg Cannito, *Corvias*

**Discussion Topics:**

1. Introductions and Agenda Review (K. Havens) ..... 8:00 AM
2. Metric Discussion (A. Booth and K. Havens) ..... 8:15 AM  
*Refer to Handout A and Figure A-1.*  
*Process: Summarize Advisory Committee input. Introduce System “Legal Basis”. Discuss proposed metrics and potential scaling factors. Obtain input from TAC on metric selection.*
3. Alternative Compliance System Approaches - Overview (M. Kieser)..... 9:15 AM  
*Refer to Handout B.*  
*Process: Overview of potential Alternative Compliance System Approaches.*
4. Overview of Market/Financial Considerations (G. Kelly)..... 9:45 AM
5. Break ..... 10:00 AM
6. Alternative Compliance System Approaches – Discussion (Group) ..... 10:15 AM  
*Process: Discuss approach options, including covering the following: (A) legal considerations, including System “Legal Basis”; (B) environmental review considerations relating to alternative controls; (C) market and financial considerations, including P3 concepts.*
7. Action Items..... 11:45 AM
8. Adjourn ..... 12:00 PM

# **Regional Compliance for a Sustainable Bay**

## **Technical Advisory Committee Meeting #2 Handout A**

### **DRAFT Definitions - Metrics**

#### **Metrics**

*Please note, the following correspond with draft proposed definitions for the Regional Alternative Compliance System **only**. The following may differ from definitions included in the Municipal Regional Permit (MRP; Order No. R2-2015-0049) or other sources.*

**Impervious Acres Greened** = impervious acres draining to green stormwater infrastructure (GSI) facilities sized to capture MRP-Defined Volume Hydraulic Design Basis (or 80% average annual runoff capture) or MRP-Defined Flow Hydraulic Design Basis [impervious acres].

**Impervious Acres Treated** = impervious acres draining to treatment facility (*allowed list to be determined, will relate to C.3 Manual*) sized to capture MRP-Defined Volume Hydraulic Design Basis (or 80% average annual runoff capture) or MRP-Defined Flow Hydraulic Design Basis [impervious acres].

**Volume Managed per Year** = total volume captured and treated by stormwater runoff capture facility per year [volume/year].

**PCBs Load Reduced** = total load reduced [g/year].

#### **Supporting Definitions**

**Green Stormwater Infrastructure (GSI)** - The construction and retrofit of storm drainage systems to reduce runoff volumes, disperse runoff to vegetated areas, harvest and use runoff where feasible, promote infiltration and evapotranspiration, and use bioretention and other natural systems to detain and treat runoff before it reaches nearby bodies of water. Facilities appropriate for use are those that meet C.3 requirements per countywide stormwater program technical guidance manuals.

**Volume Hydraulic Design Basis (from MRP Provision C.3)** – Treatment systems whose primary mode of action depends on volume capacity shall be designed to treat stormwater runoff equal to:

- (a) The maximized stormwater capture volume for the area, on the basis of historical rainfall records, determined using the formula and volume capture coefficients set forth in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998), pages 175–178 (e.g., approximately the 85<sup>th</sup> percentile 24-hour storm runoff event); or
- (b) The volume of annual runoff required to achieve 80 percent or more capture, determined in accordance with the methodology set forth in Section 5 of CASQA’s Stormwater Best Management Practice Handbook, New Development and Redevelopment (2003), using local rainfall data.

**Flow Hydraulic Design Basis (from MRP Provision C.3)** – Treatment systems whose primary mode of action depends on flow capacity shall be sized to treat:

- (a) 10 percent of the 50-year peak flow rate;

## **Regional Compliance for a Sustainable Bay Technical Advisory Committee Meeting #2 Handout A**

(b) The flow of runoff produced by a rain event equal to at least two times the 85th percentile hourly rainfall intensity for the applicable area, based on historical records of hourly rainfall depths; or

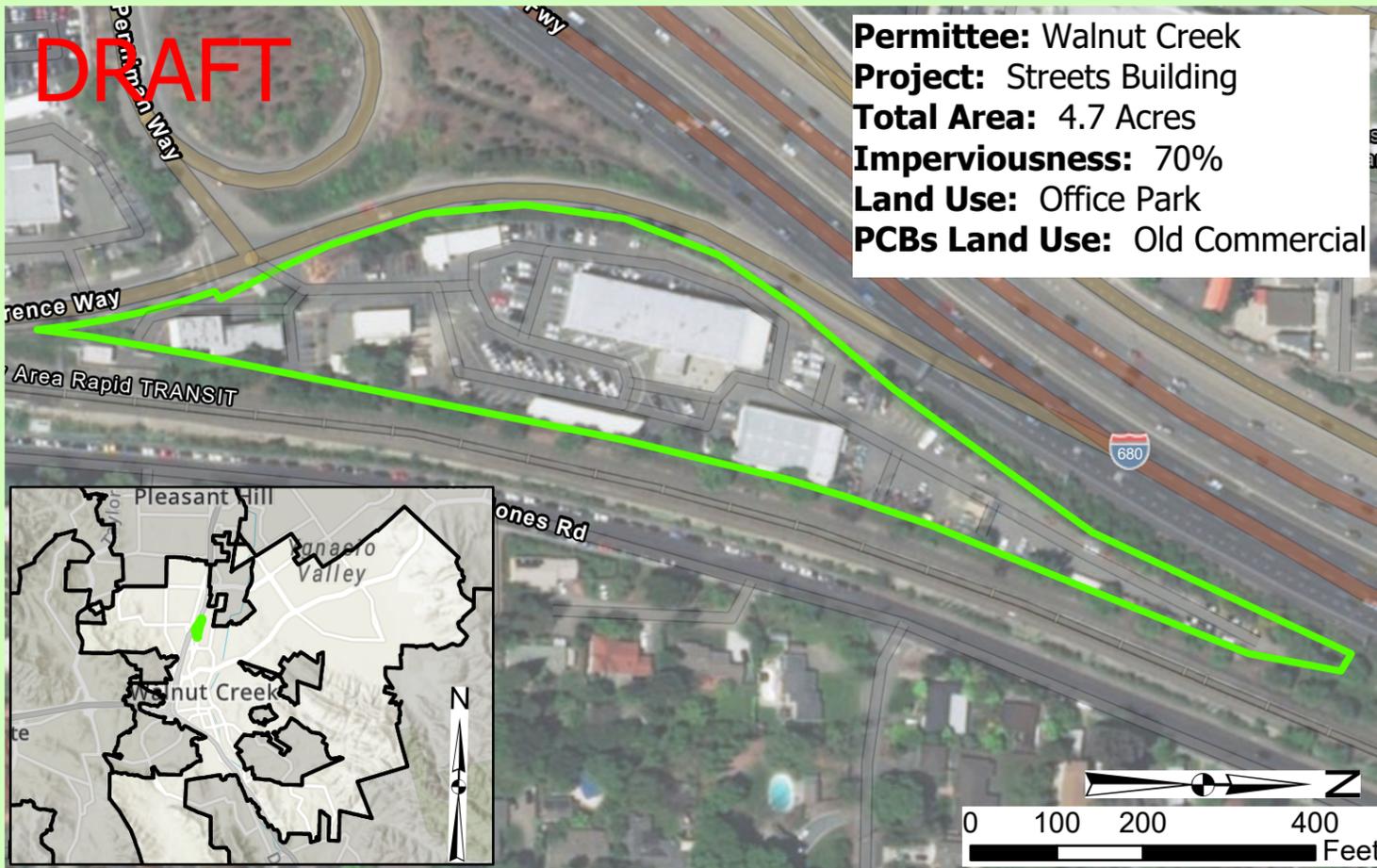
(c) The flow of runoff resulting from a rain event equal to at least 0.2 inches per hour intensity.

### **Metric Scaling Factors – Considerations**

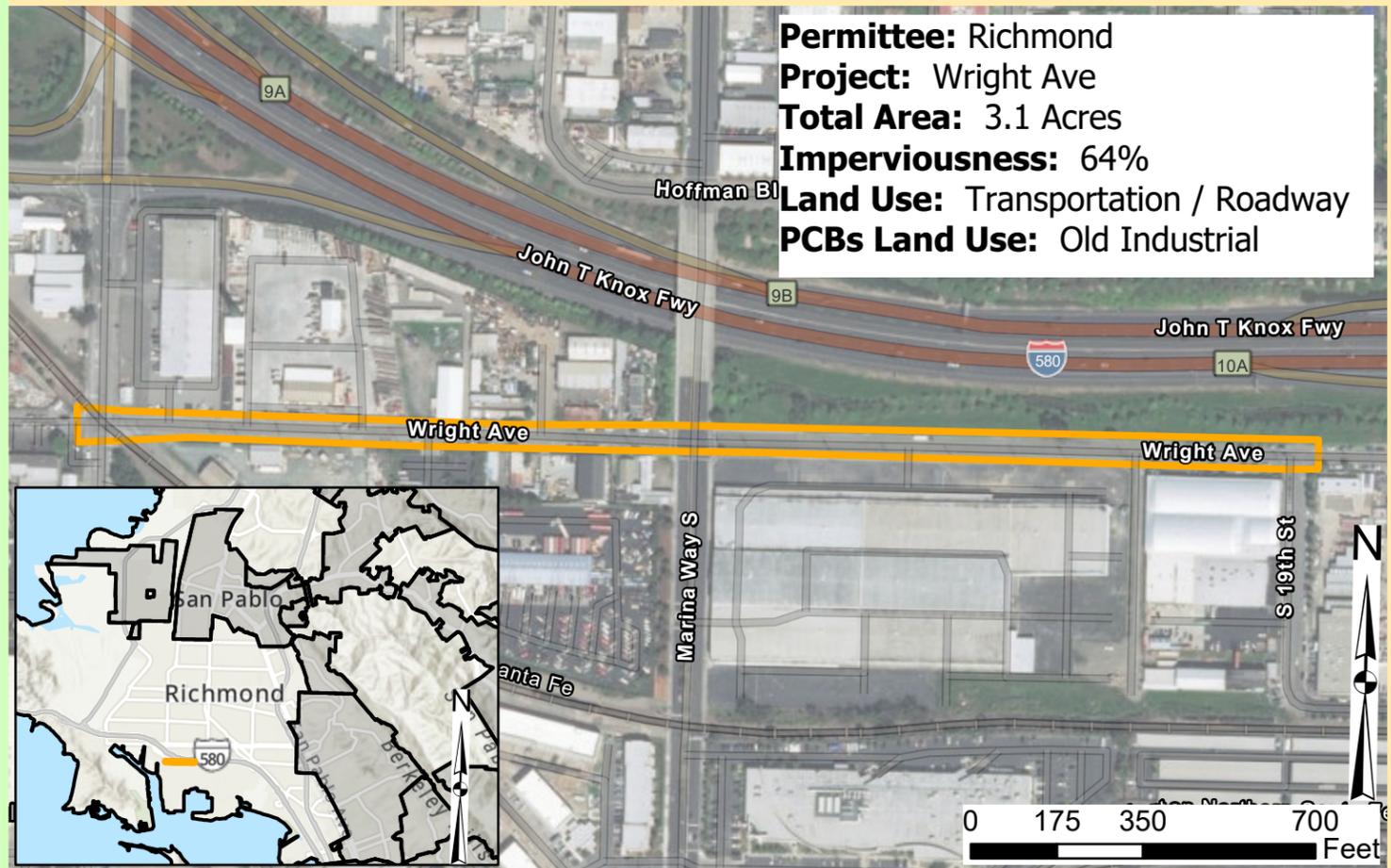
- Land Use
- Control Measure Type
- Control Measure Performance (capture and retention)
- Other ancillary benefits (i.e., flood control, climate resiliency, infiltration, water supply, etc.)
- Location (socioeconomic/political) – Disadvantaged Communities or Economically Disadvantaged Areas, equity considerations, City, etc.
- Location (buyer/seller) – distance discounting or trade ratio factor
- Seller - who
- Buyer - who
- Buyer "thresholds" (i.e., amount of credits already purchased, percent of compliance comprised of credits, etc.)
- Regional Plans or Vision/Advancing CIP
- Other?

Example project comparison – please refer to Figure A-1 for a comparison of potential “metrics” associated with three example projects. These projects are opportunities identified in lead entity GSI plans. Distinguishing information was obtained from the Contra Costa Watersheds SWRP, GSI Plans, or Contra Costa Reasonable Assurance Analysis (RAA). Sites have been examined using the Contra Costa County RAA methodology to obtain results relating to potential metrics associated with locations if a GSI facility sized to capture 80% average annual runoff volume is implemented to treat the full project drainage area.

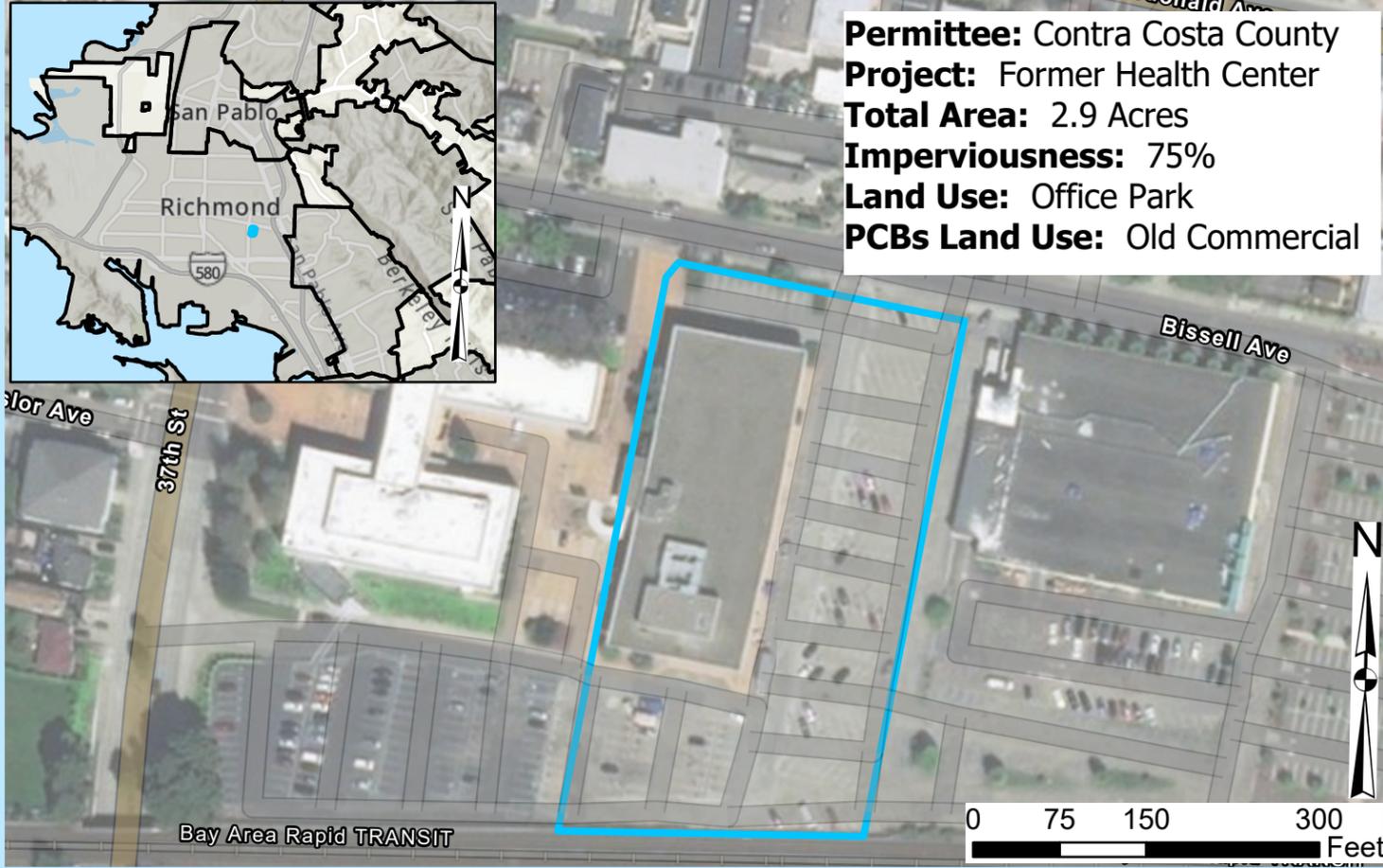
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**Permittee:** Walnut Creek  
**Project:** Streets Building  
**Total Area:** 4.7 Acres  
**Imperviousness:** 70%  
**Land Use:** Office Park  
**PCBs Land Use:** Old Commercial



**Permittee:** Richmond  
**Project:** Wright Ave  
**Total Area:** 3.1 Acres  
**Imperviousness:** 64%  
**Land Use:** Transportation / Roadway  
**PCBs Land Use:** Old Industrial



**Permittee:** Contra Costa County  
**Project:** Former Health Center  
**Total Area:** 2.9 Acres  
**Imperviousness:** 75%  
**Land Use:** Office Park  
**PCBs Land Use:** Old Commercial

Metric	Units	Streets Building, Walnut Creek	Wright Ave, Richmond	Former Health Center, Contra Costa County
Impervious Area Greened	Acres	3.3	2.0	2.1
Impervious Area Treated	Acres	3.3	2.0	2.1
Volume Treated	acre-feet/year	3.8	2.3	2.5
Area-Weighted Volume Treated	acre-feet/year per acre	0.81	0.74	0.86
PCBs Load Reduction	mg/year	160	369	93
Area-Weighted PCBs Load Reduction	mg/year per acre	34	118	32

*Preliminary calculations assume a green stormwater infrastructure facility (bioretention with incidental infiltration) sized to capture 80% average annual runoff. RAA model was used for preliminary analysis; period of record analyzed is WY 2000-2009. These preliminary example calculations do not take into account other scaling factors that could be applied, such as those provided in the "RAC\_TAC#2\_Handout A-B".*

<b>Metric Calculation Estimates for Example Hypothetical Projects, Regional Compliance for Sustainable Bay Project</b>			<b>Figure A1</b>
	LA0506	June 2020	

# **Regional Compliance for a Sustainable Bay**

## **Technical Advisory Committee Meeting #2 Handout B**

### **Potential Regional Alternative Compliance System Approaches**

**Water Quality Trading (WQT)** – A market-based approach for meeting compliance with a water quality based effluent limitation (WQBEL) in National Pollution Discharge Elimination System (NPDES) Permits. In a WQT Program, water quality benefits generated through control measures can be traded to regulated dischargers within the same trading area to meet permit requirements.

**Water Quality & Stormwater Crediting and Offsetting** – A market-based approach that shares similar qualities to the WQT approach. In contrast to WQT, which are utilized to achieve a formal load reduction cap on water pollutants in the service area, crediting & offsetting can be used to address non-pollutant water quality benefits and other regulatory drivers including new development and urban growth stormwater requirements.

**Performance-Based Contracting** – A contracting approach that requires payments to be based on outcomes instead of actions or practices. Contracts proposed through this approach are designed to meet specific environmental performance metrics and create financial incentives for producers to generate and maintain environmental outcomes overtime.

**Community-Based Public Private Partnerships (CBP3s)** – a type of performance-based contracting approach where a partnership is formed between a local government and a private entity to address a regulatory goal while meeting the needs of community stakeholders. CBP3s are typically awarded through a competitive bidding process and share many of the same financial and procurement arrangements as a tradition public private partnership.

**Wetland & Stream Compensatory Mitigation Mechanisms** – Approaches designed to meet requirements under CWA Section 404 that compels unavoidable resource losses to wetland, stream, and other aquatic resources areas to be mitigated. These mechanisms include mitigation banking and in-lieu fees.

**Mitigation Banking** – A mechanism used in compensatory mitigation that allows Permittees to purchase wetland and stream mitigation credits generated from an offsite mitigation bank. Mitigation banks are sponsored by public or private mitigation bankers and are secured and initiated in advance of debits.

**In-Lieu Fees** – A mechanism used in compensatory mitigation that allows Permittees to provide funds in the form of an in-lieu fee to an administering government or non-profit conservation organization and pooled to build and maintain offsite mitigation sites.

**Payment for Ecosystem Services** – A general approach for creating incentives for service providers to supply an ecological service. In the context of urban settings and stormwater, this concept has been explored by municipalities and utilities to provide water quality benefits for the watershed through forest management and practices.