Regional Compliance for a Sustainable Bay

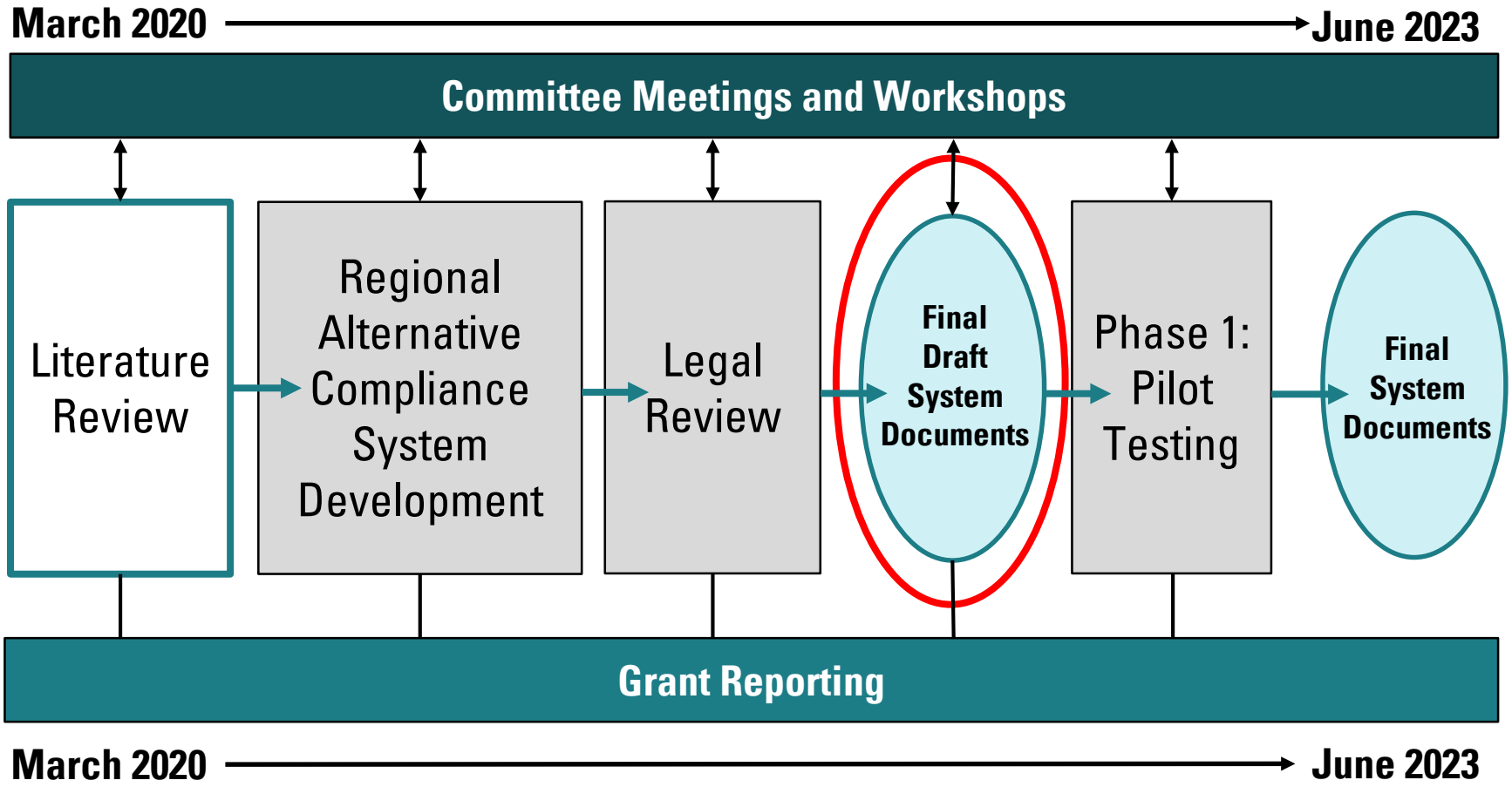
CCCWP Development Committee

October 18, 2022

CITY OF SAN PABLO
City of New Directions

Project Schedule

Overall Project Schedule



October, 2022 through June, 2023

Project Deliverable	Completion Date
AC and CCCWP Permittee Meetings	October 2022
AC and CCCWP Permittee Review of Final Draft System Summary Report	December 2022
Stakeholder Workshop #2	Q1 2023
Test Drive of Templates for Pilot Project Exchange(s)	Q2 2023
Final Program Documents	June 2023
Final Project Report	June 2023

Final System and Summary of Legal Review

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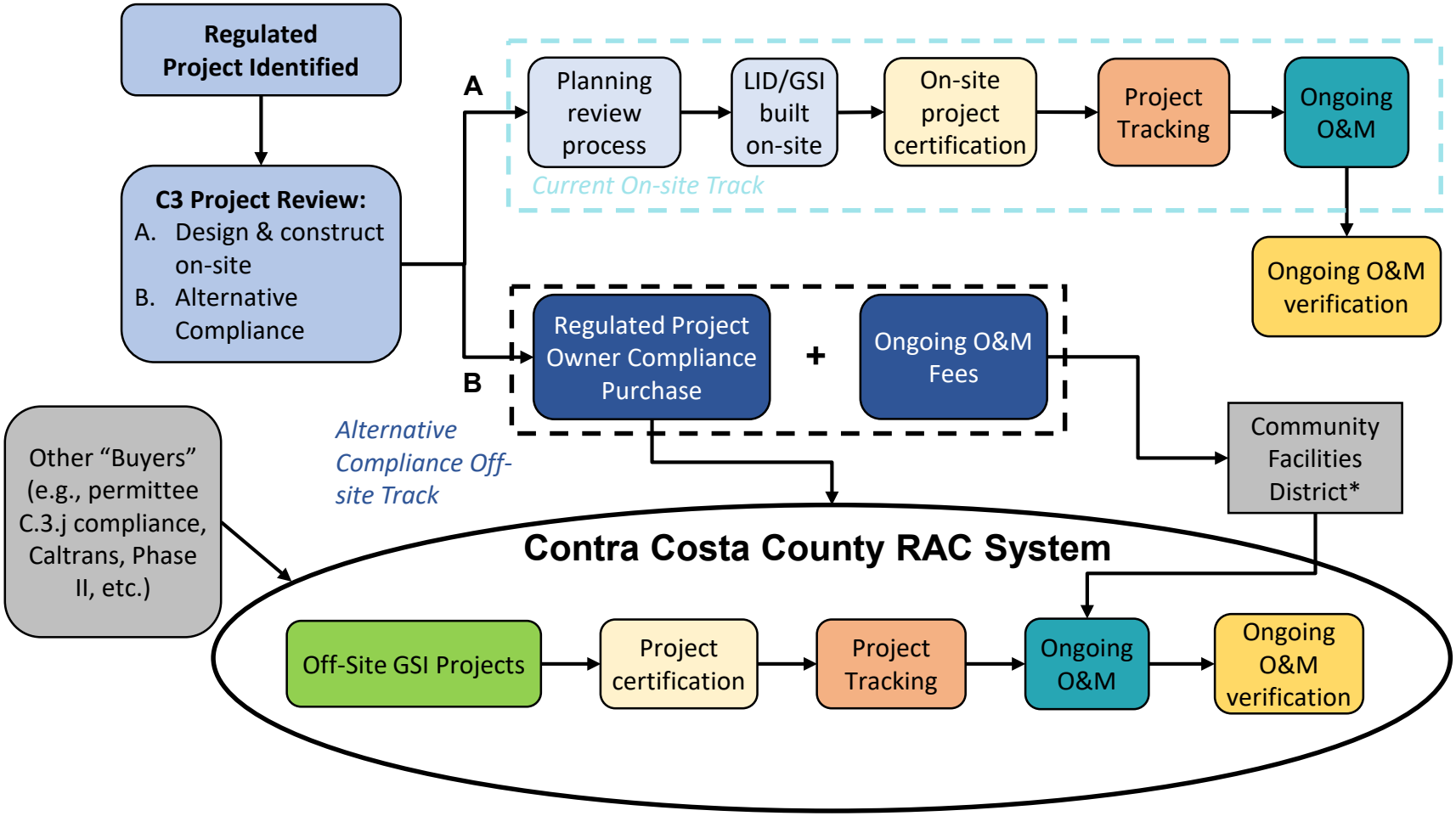
Final RAC System



Off-Site GSI Projects

- Generate “Equivalent Acres Greened” compliance units
- <u>Must be certified within three years of initial exchange</u>
  - Certification includes design review and inspections to confirm the Off-Site GSI Project is designed compliant with the MRP
- Tracked in RAC System Tracking Tool
- Compliance units used to calculate compliance purchase amounts

GSI Image: City of San Pablo

RAC Metric: Compliance Unit

Defined using language in MRP Provision C.3.e.i as requiring three elements:

- Hydraulically-sized treatment in accordance with Provision C.3.d with LID/GSI treatment measures of an equivalent quantity of both **stormwater runoff** and **pollutant load**, which is referred to as **"Equivalent Acres Greened"**;
- A **net environmental benefit**; and
- A proportional share of the O&M costs of the Off-Site GSI Project, which is referred to as an "**Ongoing O&M fee**".

RAC Compliance Purchase

$$Purchase_{Compliance} = (Equivalent\ Acres\ Greened \times NEB\ Ratio) \times Cost_{EAG} + Payment_{Administrative}$$

1

2

and an ongoing O&M fee

3

Calculate Equivalent Acres Greened

For a Regulated Project, to calculate Equivalent Acres Greened to purchase:

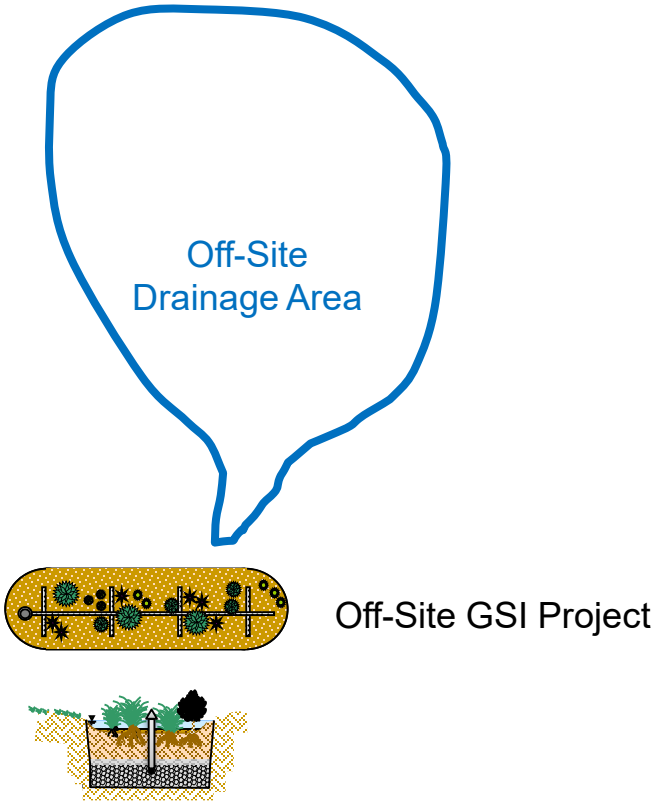
$$Equivalent\ Acres\ Greened_{RP} = Runoff\ Generating\ Acres_{RP} \times Ratio_{Rainfall} \times Ratio_{Pollutant}$$

$$Runoff\ Generating\ Acres = Acres_{Impervious} + (0.1 \times Acres_{Pervious})$$

For other buyers, equivalency not required
Purchase Equivalent Acres Greened or Impervious Acres desired

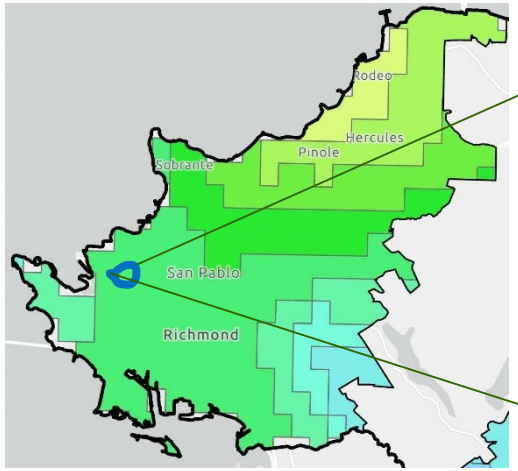
Compliance Unit Example

- Each Equivalent Acre Greened compliance unit has a **rainfall zone** and a **land use** associated with it



Optional Underdrain Collection System

Exchange Example: Rainfall Zone

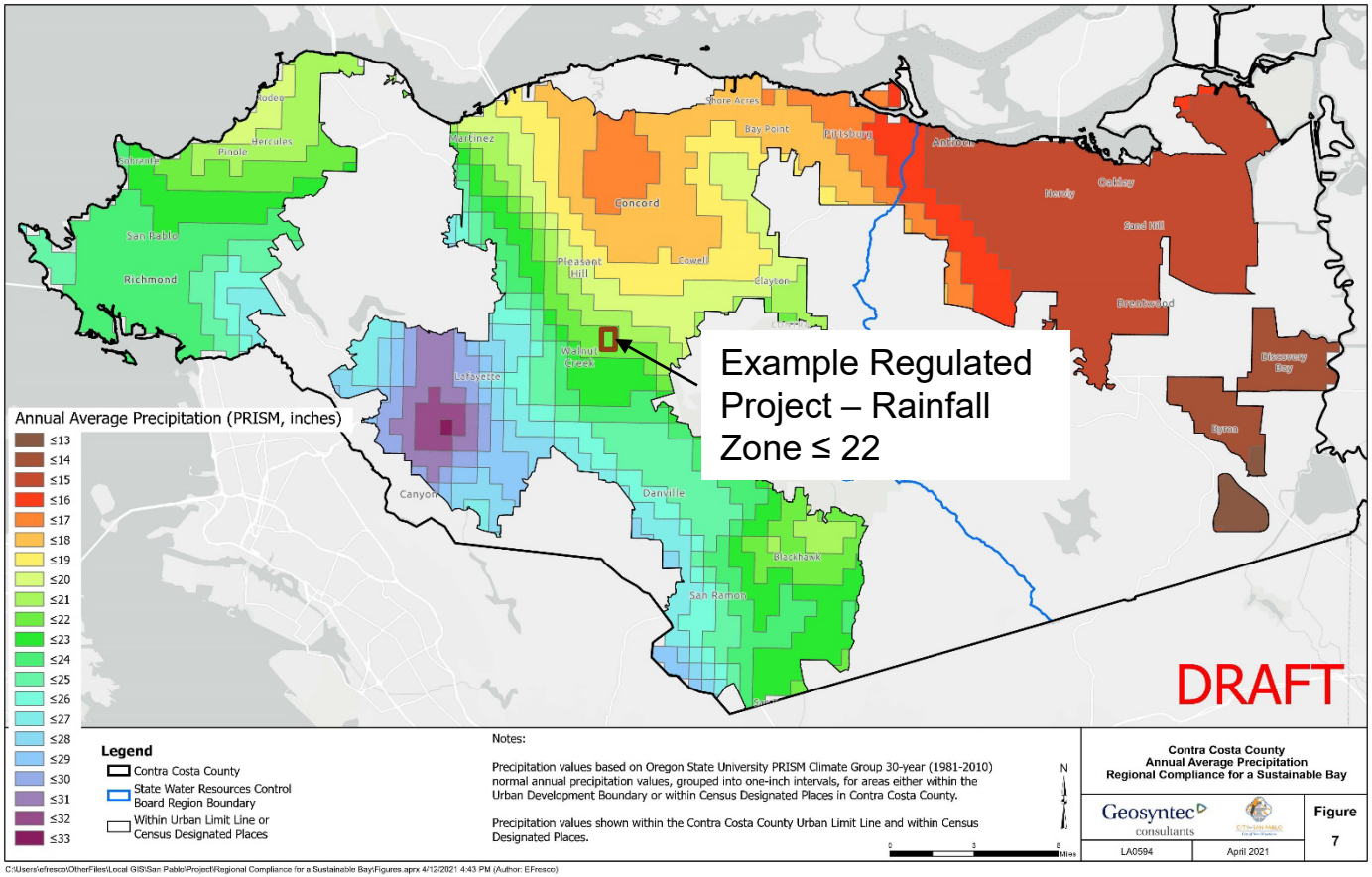


Rainfall Zone ≤ 24

Identify the Rainfall Zone Associated with Compliance Units

Off-Site GSI Project

Exchange Example: Rainfall Zone



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Rainfall Ratio

Exchange Ratio Matrix	Equivalent Acres Greened Annual Average Rainfall Zone[1] (inches)																				
Regulated Project Annual Average Rainfall Zone (inches)	≤13	≤14	≤15	≤16	≤17	≤18	≤19	≤20	≤21	≤22	≤23	≤24	≤25	≤26	≤27	≤28	≤29	≤30	≤31	≤32	≤33
≤13	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤14	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤15	1.2	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤16	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤17	1.3	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤18	1.4	1.3	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤19	1.5	1.4	1.3	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤20	1.5	1.4	1.3	1.3	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤21	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤22	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤23	1.8	1.6	1.5	1.4	1.4	1.3	1.2	1.2	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤24	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤25	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤26	2.0	1.9	1.7	1.6	1.5	1.4	1.4	1.3	1.2	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤27	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.2	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤28	2.2	2.0	1.9	1.8	1.6	1.6	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤29	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤30	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.2	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*
≤31	2.4	2.2	2.1	1.9	1.8	1.7	1.6	1.6	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.1	*1.0*	*1.0*	*1.0*	*1.0*
≤32	2.5	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.1	*1.0*	*1.0*	*1.0*
≤33	2.5	2.4	2.2	2.1	1.9	1.8	1.7	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.1	*1.0*	*1.0*

Exchange Example: Rainfall Ratio

Equivalent Acres Greened units
Rainfall Zone ≤ 24
Land Use Y

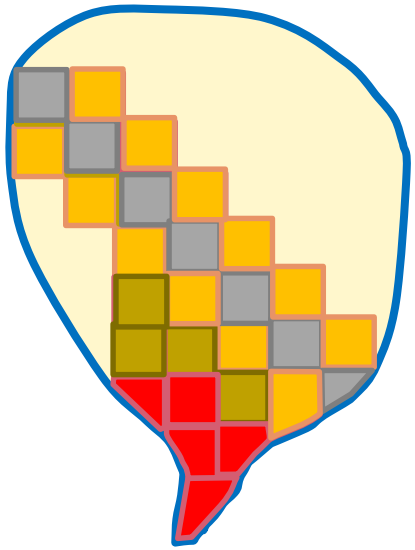
Regulated Project
1 acre runoff generating area
Rainfall Zone ≤ 22
Land Use Z

$$Equivalent\ Acres\ Greened_{RP} = Runoff\ Generating\ Acres_{RP} \times Ratio_{Rainfall} \times Ratio_{Pollutant}$$

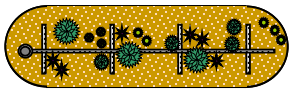
1 acre 1.0

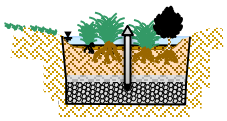
Compliance Unit Example: Land Uses

- Residential
- Commercial
- Institutional
- Transportation (Principal +)
- Industrial



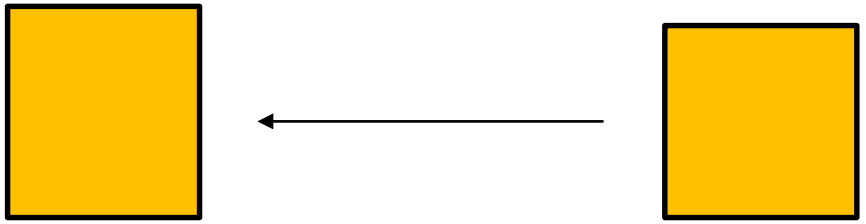
Identify the Land Uses Associated with Equivalent Acres Greened Compliance Units





Off-Site GSI Project

Visual Example: Compliance Purchase



Equivalent Acres Greened units
Rainfall Zone ≤ 24
Land Use Commercial

Regulated Project
1 acre runoff generating area
Rainfall Zone ≤ 22
Land Use Commercial

$$Equivalent\ Acres\ Greened_{RP} = Runoff\ Generating\ Acres_{RP} \times Ratio_{Rainfall} \times Ratio_{Pollutant}$$

1 acre 1.0

Pollutant Ratio

Exchange Ratio Matrix		Off-Site Project Land Use Category			
		Residential, Commercial, or Institutional [1]	Transportation [2]	New Industrial	Old Industrial and Source Areas
Regulated Project Land Use Category	Residential, Commercial, or Institutional [1]	1.0	1.0	1.0	1.0[3]
	Transportation [2]	1.3	1.0	1.0	1.0[3]
	Industrial	1.8	1.4	1.0	1.0[3]

[1] Includes adjacent collector and local roadways.
[2] Transportation includes interstate highways, freeways, multilane highways, and principal arterials.
[3] Net environmental benefit discount applied to purchase.

Visual Example: Compliance Purchase

Equivalent Acres Greened units
Rainfall Zone ≤ 24
Land Use Commercial

Regulated Project
1 acre runoff generating area
Rainfall Zone ≤ 22
Land Use Commercial

$$Equivalent\ Acres\ Greened_{RP} = Runoff\ Generating\ Acres_{RP} \times Ratio_{Rainfall} \times Ratio_{Pollutant} = 1.0$$

1 acre 1.0 1.0

$$Purchase_{Compliance} = (Equivalent\ Acres\ Greened \times NEB\ Ratio) \times Cost_{EAG} + Payment_{Administrative}$$

1.0 1.1 $100,000 $15,000

= $125,000

Visual Example: Compliance Purchase

Equivalent Acres Greened units
Rainfall Zone ≤ 24
Land Use Commercial

Regulated Project
1 acre runoff generating area
Rainfall Zone ≤ 22
Land Use Transportation

$$Equivalent\ Acres\ Greened_{RP} = Runoff\ Generating\ Acres_{RP} \times Ratio_{Rainfall} \times Ratio_{Pollutant}$$

1 acre 1.0

Pollutant Ratio

Exchange Ratio Matrix		Off-Site Project Land Use Category			
		Residential, Commercial, or Institutional [1]	Transportation [2]	New Industrial	Old Industrial and Source Areas
Regulated Project Land Use Category	Residential, Commercial, or Institutional [1]	1.0	1.0	1.0	1.0[3]
	Transportation [2]	1.3	1.0	1.0	1.0[3]
	Industrial	1.8	1.4	1.0	1.0[3]

[1] Includes adjacent collector and local roadways.
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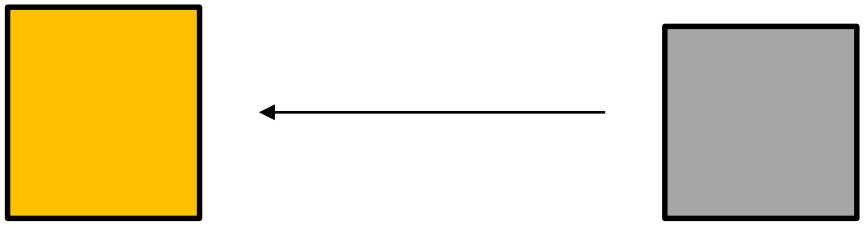
[3] Net environmental benefit discount applied to purchase.

Visual Example: Compliance Purchase



Equivalent Acres Greened units
Rainfall Zone ≤ 24
Land Use Commercial

Regulated Project
1 acre runoff generating area
Rainfall Zone ≤ 22
Land Use Transportation

$$Equivalent\ Acres\ Greened_{RP} = Runoff\ Generating\ Acres_{RP} \times Ratio_{Rainfall} \times Ratio_{Pollutant} = 1.3$$

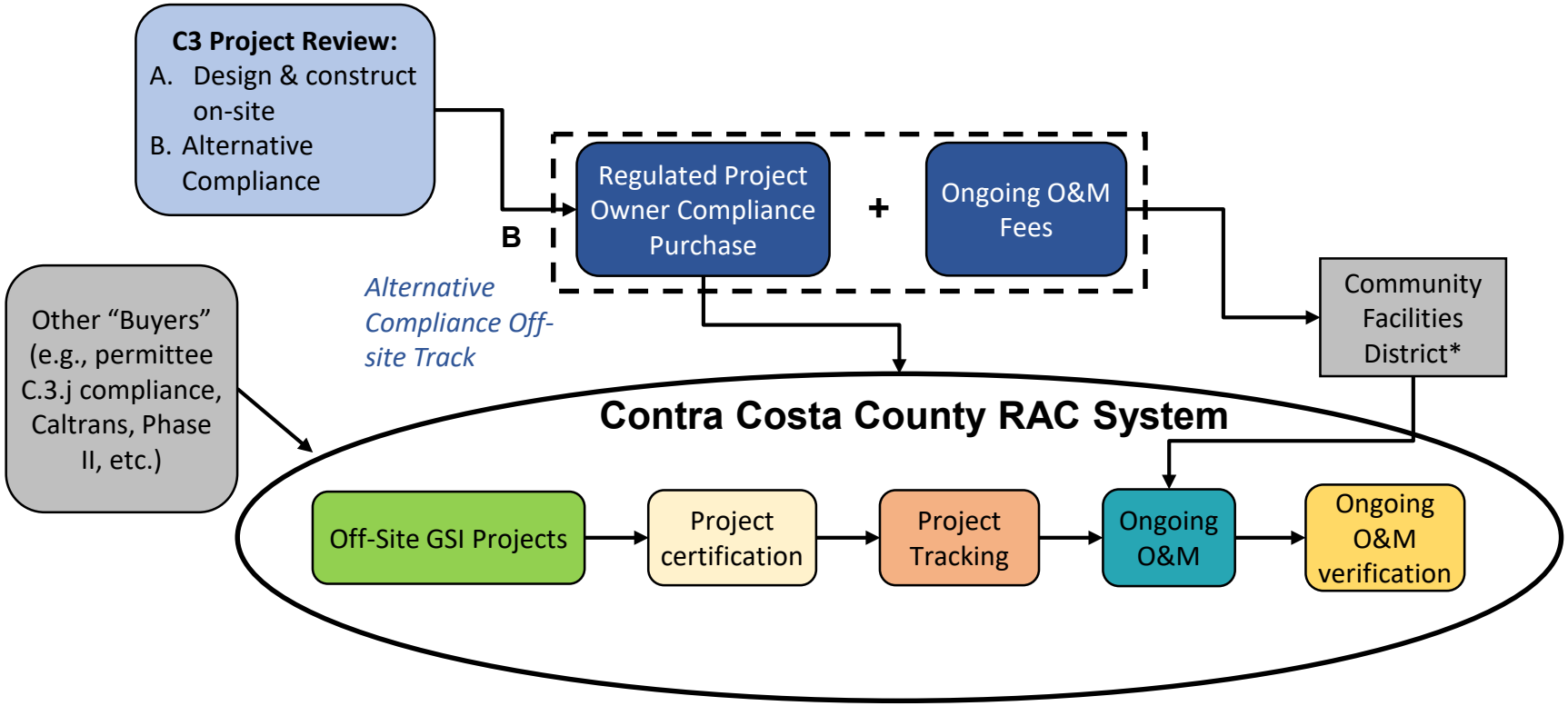
1 acre | 1.0 | 1.3

$$Purchase_{Compliance} = (Equivalent\ Acres\ Greened \times NEB\ Ratio) \times Cost_{EAG} + Payment_{Administrative}$$

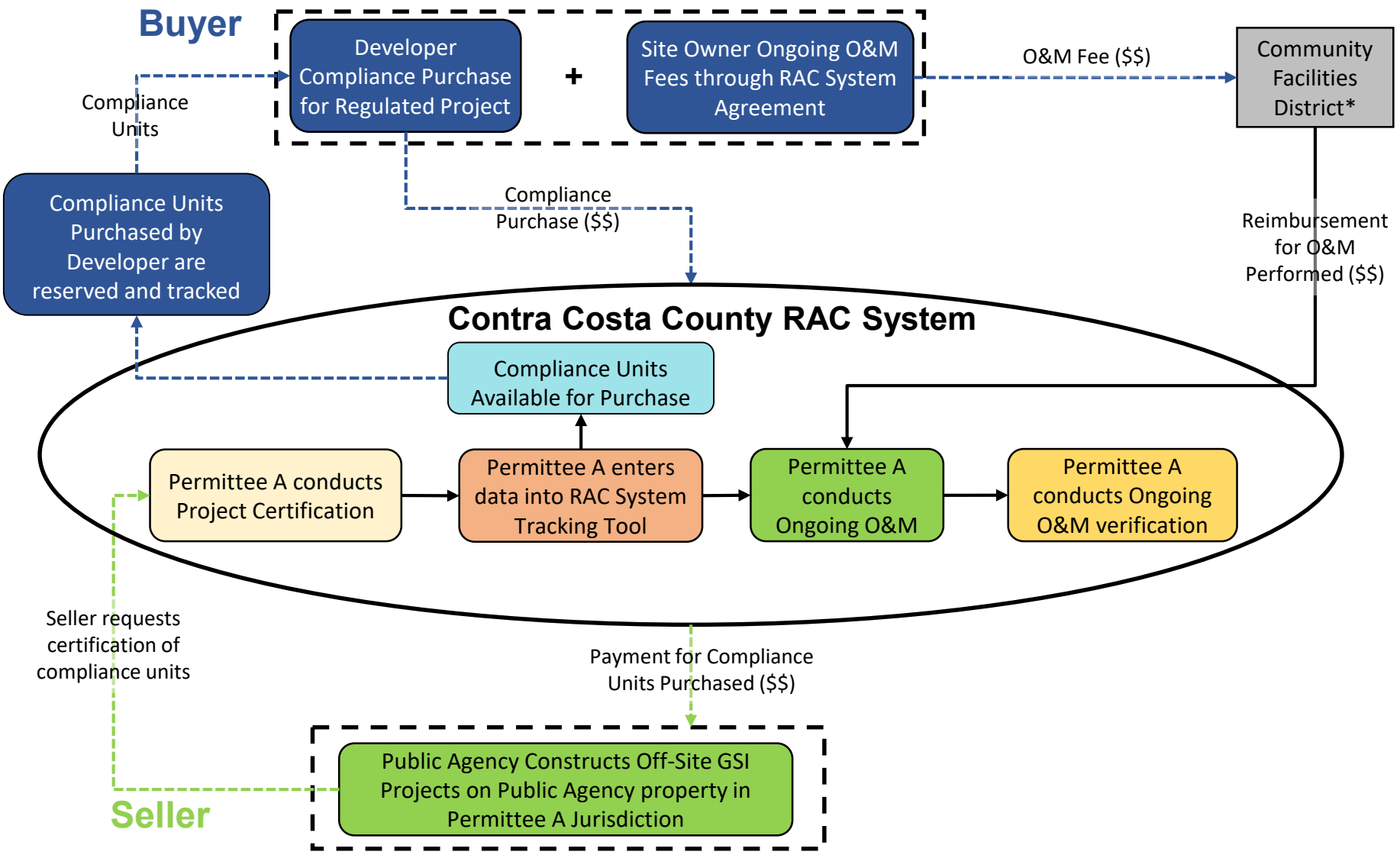
1.3 | 1.1 | $100,000 | $15,000

= $158,000

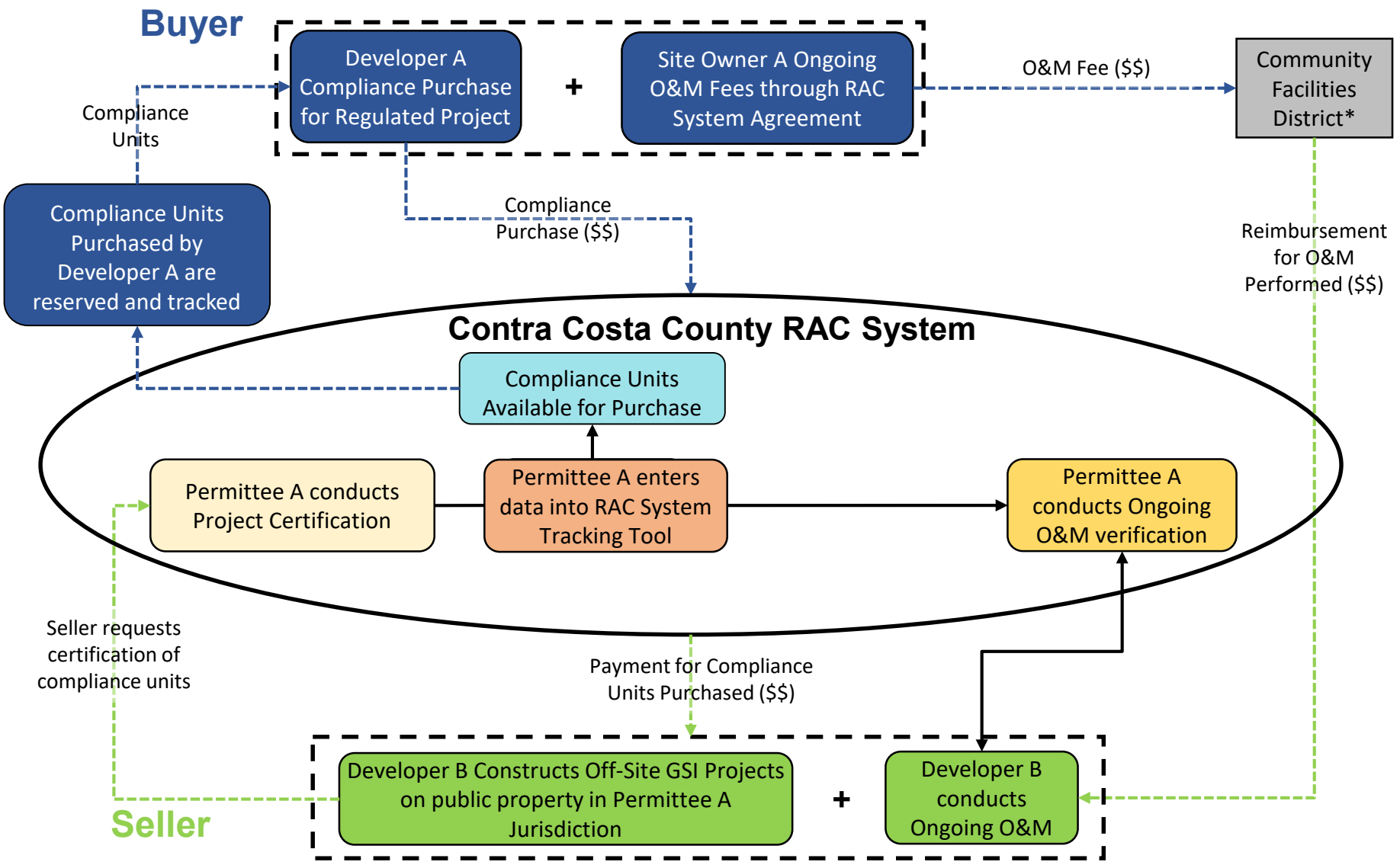
RAC System – Example Exchanges



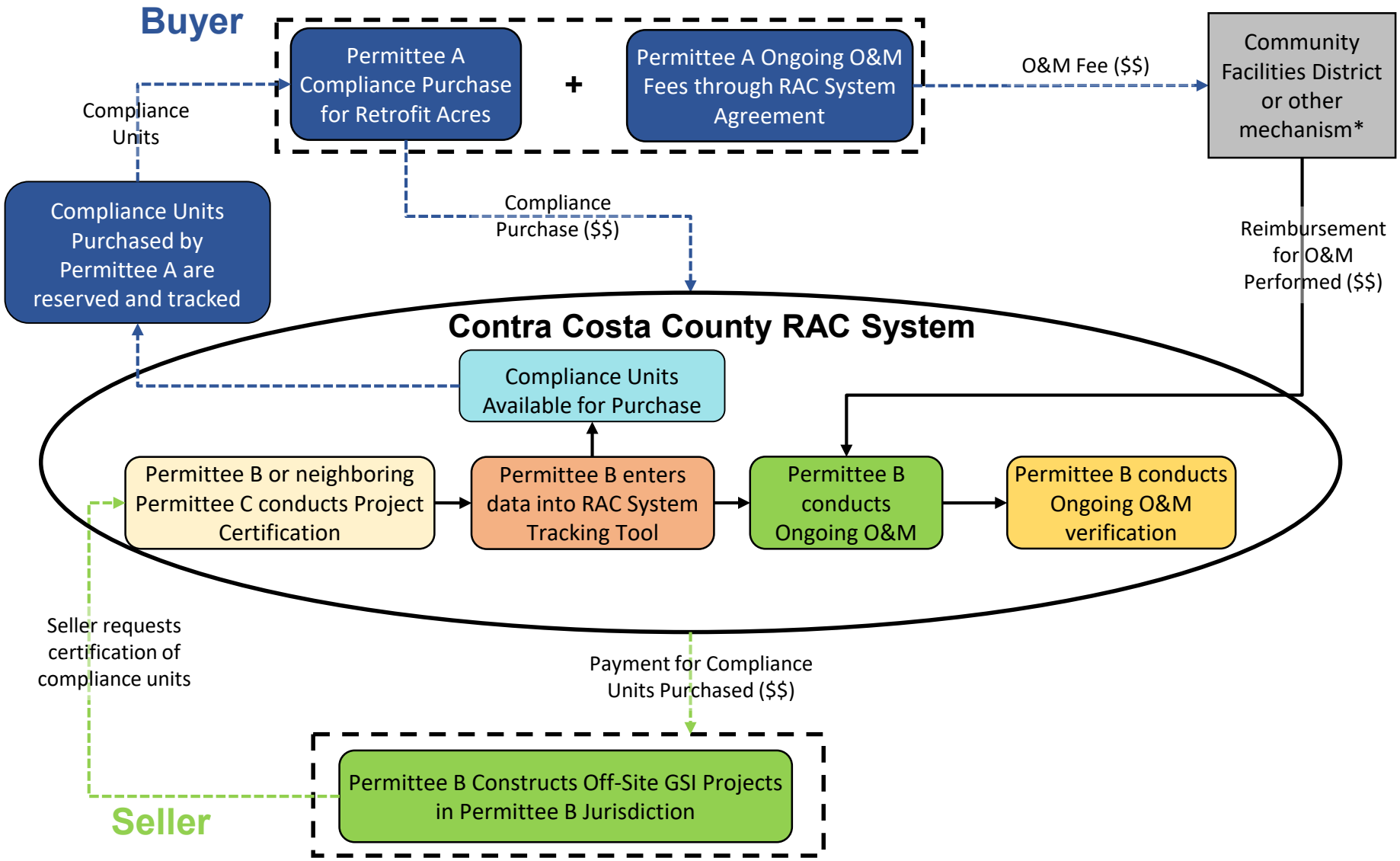
Public Agency to Developer Exchange



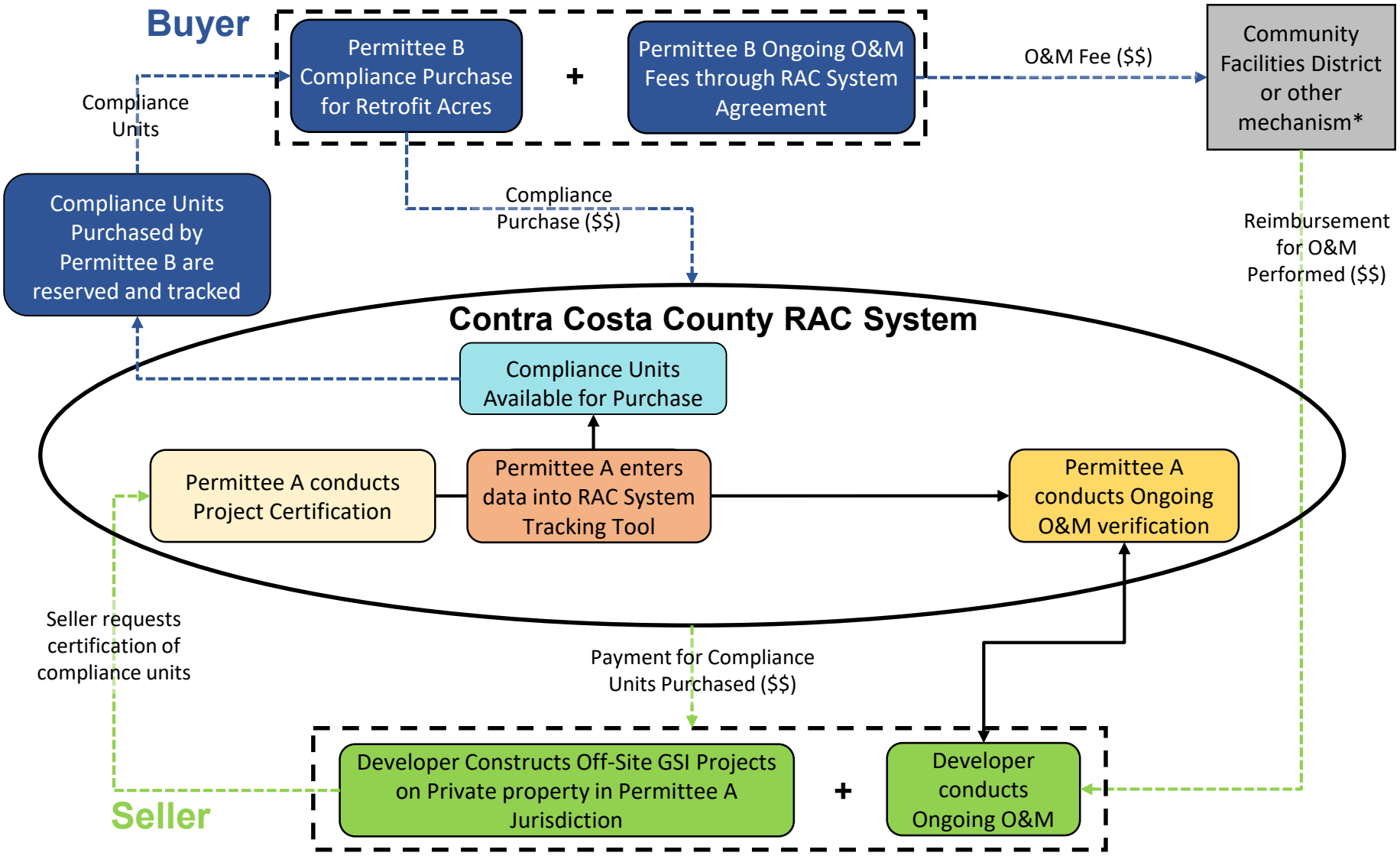
Private Entity to Developer Exchange



Public Agency to Public Agency Exchange



Private Entity to Public Agency Exchange



Legal Review

Legal Reviewers

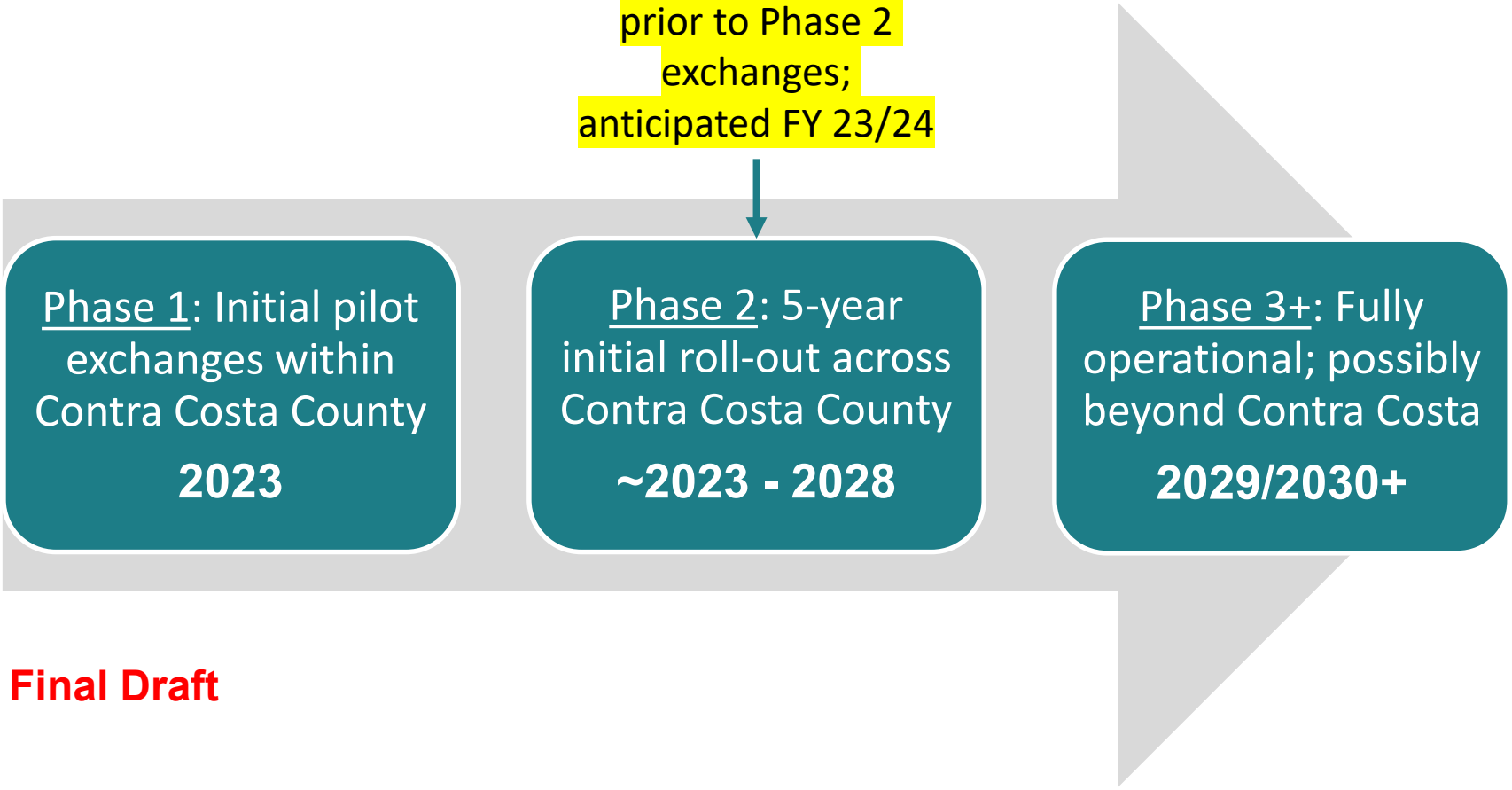
- Legal Reviewers included:
  - Water Board
  - EPA
  - Contra Costa Clean Water Program
  - Contra Costa County
  - City of San Pablo
  - City of Walnut Creek
- Over 300 comments received
- Provided detailed response on 160 comments and follow-up calls, memos, e-mails, presentations

Major Legal Review Comments

1. System Objectives
2. PCBs and Mercury TMDL Drivers
3. Administrative Structure – Permittee Role
4. Flood Control District Role/O&M Fee Approach
5. CEQA Considerations
6. Mitigation Fee Act
7. System Boundaries/Restrictions
8. Funding/Financing and Compliance Unit Cost Basis
9. Adaptive Management – Amendments
10. Water Board Item: Pollutant Ratio

Contra Costa County RAC System Roll-Out

Permit Amendment Process will occur prior to Phase 2 exchanges; anticipated FY 23/24



Final Draft

Questions and Discussion

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City of New Directions

Next Steps and Action Items

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Next Steps

- WQIF Grant Scope
  - Old Industrial Treatment Plan (Part II)
  - Funding and Delivery Roadmap
  - Community Facilities District Development
  - Treatment Project Design and/or Implementation
  - Outreach
- November – seeking Management Committee approval of conditionally approved items
- Sutter Avenue project in San Pablo planned for pilot exchange

Next Steps – RAC Summary Report

- Permittees - provide comments on Final Draft RAC Summary Report by **December 2**

- Virtual Workshop will be held Q1 2023; invitation will be sent to Advisory Committee to distribute
- Final RAC System Project Report submitted by June 30, 2023
- RAC System Phase 2 studies will commence FY 23/24

- Looking into using RAC System for C.12.c treatment acres

Extra Slides

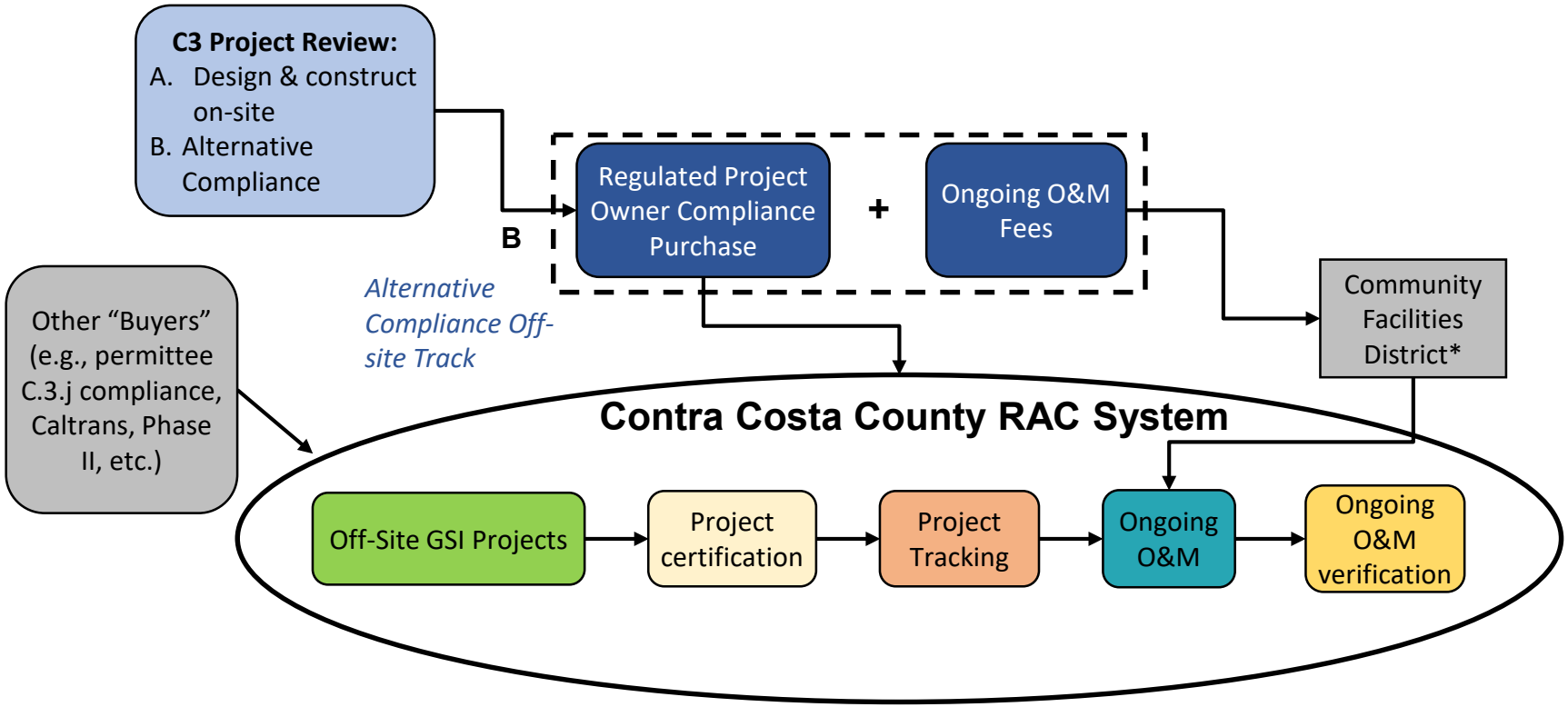
1. System Objectives/2. TMDL Drivers

1. Flexible compliance with the MRP, particularly Provision C.3.b, C.3.e, and potentially also Provision C.3.j;
2. Cost efficiencies through larger stormwater capture projects;
3. Targeted implementation of facilities that can provide higher TMDL load reduction benefits;
4. Implementation of multi-benefit projects; and
5. Flexibility to adapt the system to meet future water quality needs.

TMDL pollutants not exchanged specifically, but RAC System designed to facilitate projects that provide more reduction of these pollutants

3. Permittee Role

- Participating permittees will play a major role in the RAC System
- The RAC System is designed to provide reimbursement for this role
- The intention is to not require more work than would otherwise be needed for basic C.3 (and potentially C.11/12) compliance actions



4. Flood Control District/ O&M Fee Approach

- Upfront payment not likely to cover all future facility costs
- Ongoing payment preferred
- A number of mechanisms explored
- Community Facilities District has been identified and recommended as the approach for the ongoing O&M fee
  - Levied on participating Regulated Project parcels on a cost per "Equivalent Acre Greened" basis
- For compliance purchases not tied to a parcel, likely a separate agreement would dictate the ongoing O&M fee
- FCD likely to act as fiduciary agent; Administrator TBD

Legal Topics 5, 6, 7

5. CEQA Considerations

- Previously had designed RAC System to only allow compliance units to be exchanged after Off-Site GSI Project construction
- Now allowing exchange up to 3 years prior to construction of Off-Site GSI Projects with a high likelihood of implementation

6. Mitigation Fee Act

- This will not apply to the RAC System; have removed references

7. System Boundaries/Restrictions

- Exchanges can be made between any eligible entities within Contra Costa County

8. Funding/Financing, Compliance Unit Cost Basis

- Many options for funding and financing were preliminarily explored through the RAC System development
- During Phase 2, a roadmap for funding and financing of the RAC System will be developed
- The cost of the Off-Site GSI Projects implemented will set the compliance unit cost
  - Strategies to lower this cost have been explored and identified in the RAC System Summary Report

9. RAC System Adaptive Management

- The RAC System will be adaptively managed over time to allow for its ongoing effectiveness and success
- Minor programmatic changes would require updates to internal RAC System Documents but would not require policy related changes
- Changes that could affect water quality outcomes would require updates to permit language
  - Would occur during the normal permit reissuance processes, or
  - (only if needed) through an amendment to the MRP

10. Pollutant Ratio

- Water Board had many questions about the pollutant ratio approach
- Pollutant ratios were reanalyzed and updated in response

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