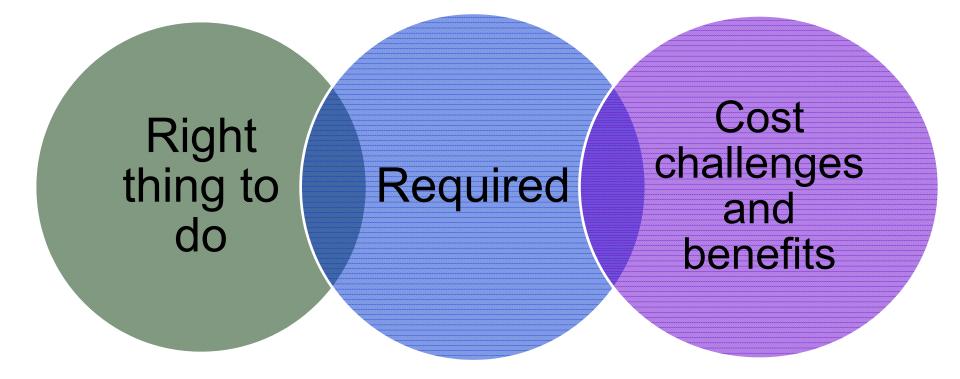
#### Green Infrastructure Planning in Bay Area Cities

Thomas Mumley Assistant Executive Officer San Francisco Bay Water Board

March 28, 2017



# Widespread Green Infrastructure and Sustainable Streets Needed



MRP Requirements for Green Infrastructure

 Green Infrastructure Planning and Implementation (C.3.j)
Mercury Controls (C.11)
PCBs Controls (C.12)

#### **GI Planning and Implementation**

Framework or workplan for Plan

• "Decision maker(s)" approval - June 2017

Green Infrastructure Plan

• Submit w/ Sep 2019 Annual Report

Can serve as Storm Water Resources Plan required for grant funding

#### **Mercury Control**

82 kg/yr regionwide wasteload allocation

- 2003 load estimate ≈160 kg/yr
- 2015 load estimate ≈115 kg/yr

 $\approx$  25 percent load reduction

Mercury Control by 2020 via Green Infrastructure

 48 g/yr load reduction
Plan for load reductions with estimates for 2030 and 2040
At least 10 kg/yr by 2040

#### PCBs Control

2 kg/yr regionwide wasteload allocation

2003 load estimate
≈ 20 kg/yr

 $\approx$  90 percent load reduction

PCBs Control by 2020 via Green Infrastructure

 120 g/yr load reduction
Plan for load reductions with estimates for 2030 and 2040
At least 3 kg/yr by 2040



#### Other Green Infrastructure and Sustainable Streets Drivers

Reduce pollutant load due to directly connected impervious surfaces

Transportation vehicle pollutants

• Copper, PAHs, zinc



- Other atmospheric deposition pollutants
- Pesticides
- Other contaminants of emerging concern
- Trash

#### Other Green Infrastructure and Sustainable Streets Drivers

- Hydromodification management
- Aging infrastructure
- Climate change and sea level rise adaptation and resiliency



Green Infrastructure  $\Leftrightarrow$  Design and Operation of Roadways

- Streets and roads are part of storm drain system
- Integrate vs competing capital improvement needs and costs
- Integrate vs competing O&M needs and costs

### Bay Area \$\$\$\$

Assessed property value  $\approx$  \$1.5 trillion

Bay Area GDP  $\approx$  \$500 billion/yr

Wastewater management  $\approx$  \$1 billion/yr

Urban runoff management < \$100 million/yr

Transportation Improvement Program  $\approx$  \$7 billion/4yr

### GI $\Leftrightarrow$ Roadway Funding

#### Communicate up via "decision maker(s)" approval of GI framework

• Get them to engage MTC

## Account for integration in all funding initiatives

• Local, regional, and statewide ballot measures