# Green Infrastructure Planning in Contra Costa

Mandates, Works in Progress, and Next Steps

Dan Cloak, P.E. May 10, 2018



### Topics

- What is Green Infrastructure?
- Provision C.3 and Private Development
- Mandate for a Green Infrastructure Plan
- CCCWP Assistance to Municipalities
- Takeaways

#### What is Green Infrastructure?

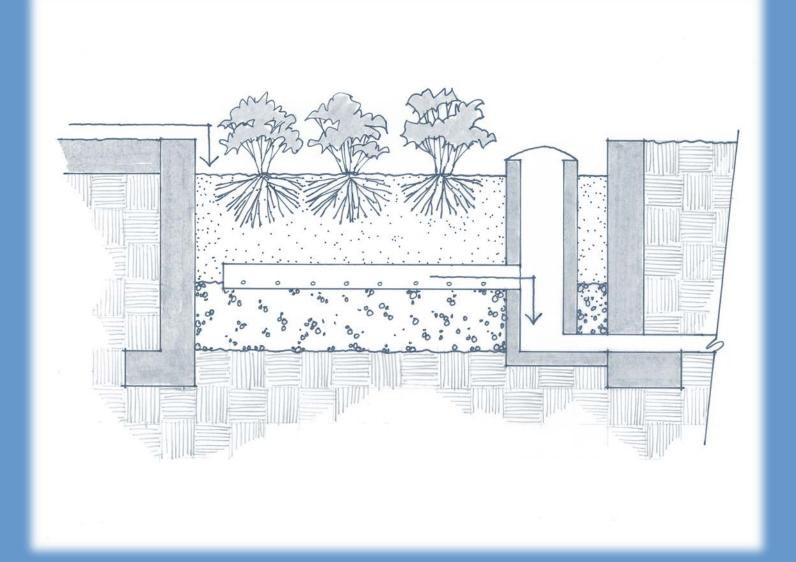
- Retrofit existing street drainage with Low Impact Development drainage design
- Also encompasses LID for development and redevelopment







## Bioretention



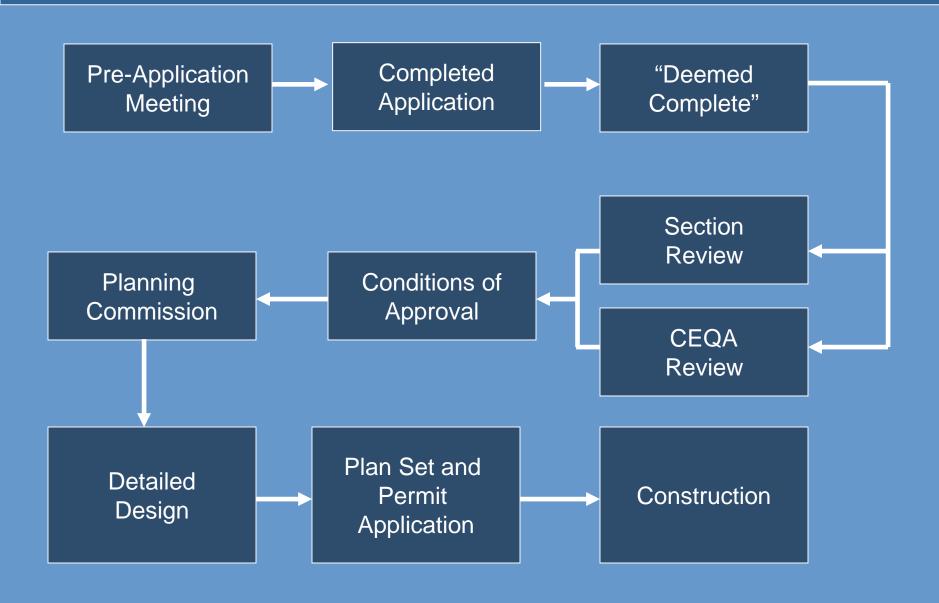
#### Green Infrastructure Benefits

- Stops spills, dumping, and "urban slobber"
- Sustainable, low maintenance treatment
- Synergies
  - Multi-modal transport, "complete streets"
  - Urban greening and air quality
  - Heat island mitigation
  - Active and passive recreation
  - Urban creek restoration and habitat creation

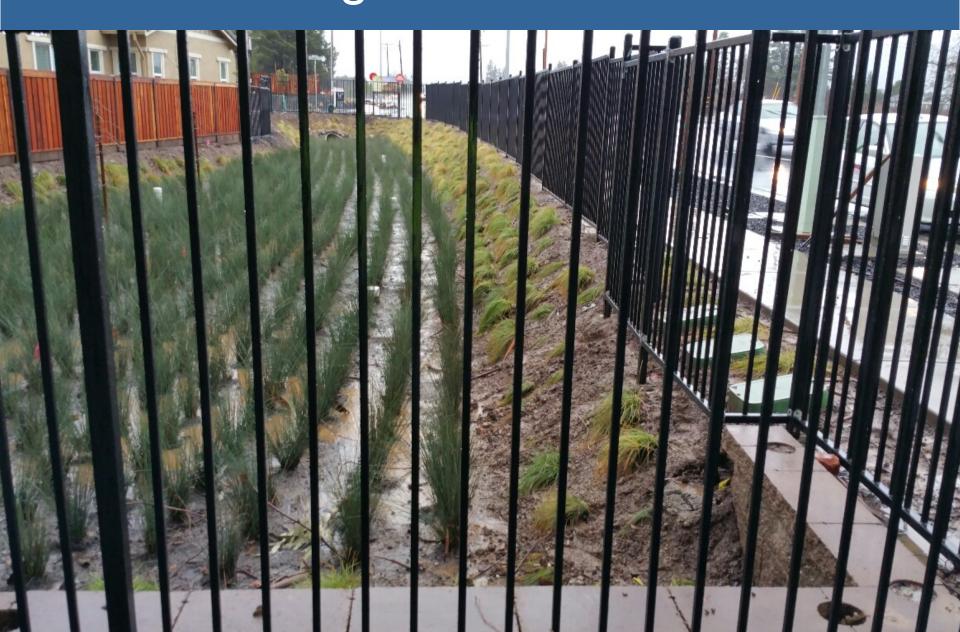
### Private Development

- Provision C.3 has been in effect since 2005
- Applies to Commercial Development
  - > 10,000 SF new or replaced impervious area
  - > 5,000 SF for auto-related and restaurants
- Applies to Residential Subdivisions
- Low Impact Development design is required
- Use the Stormwater C.3 Guidebook

## Development Review Process



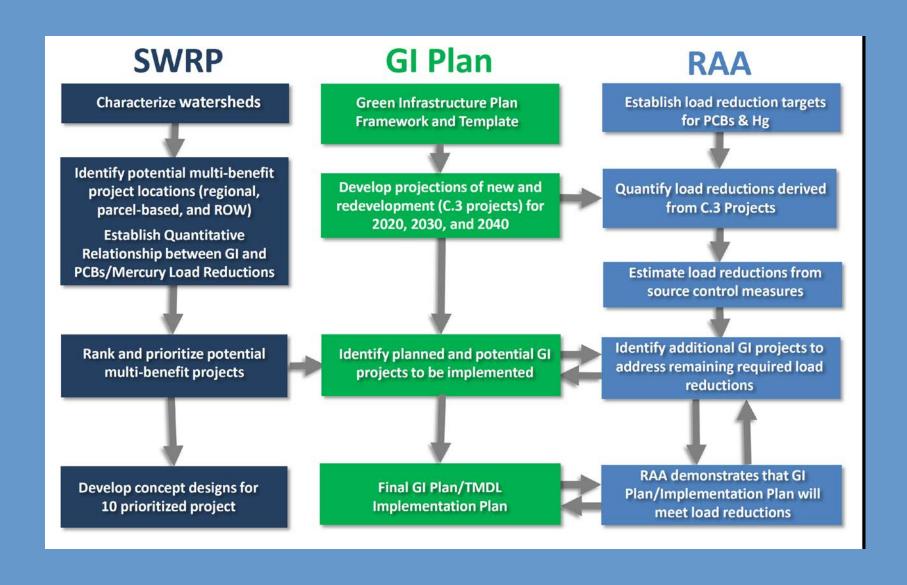
# Potential negative outcomes



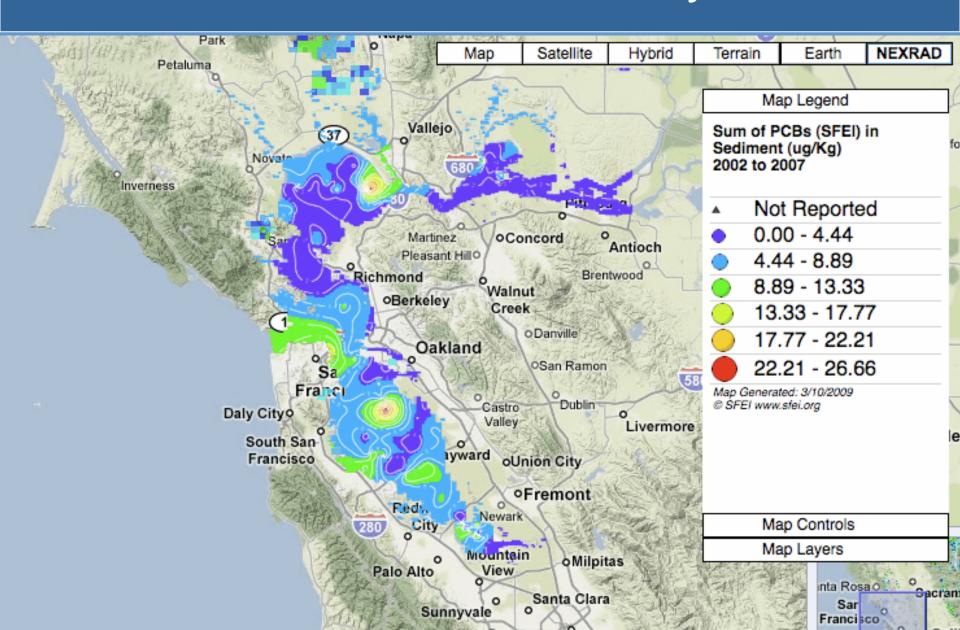
#### Green Infrastructure Plans

- A Plan for each municipal Permittee
- Frameworks/Work Plans were adopted by June 2017
- Plans are due September 30, 2019

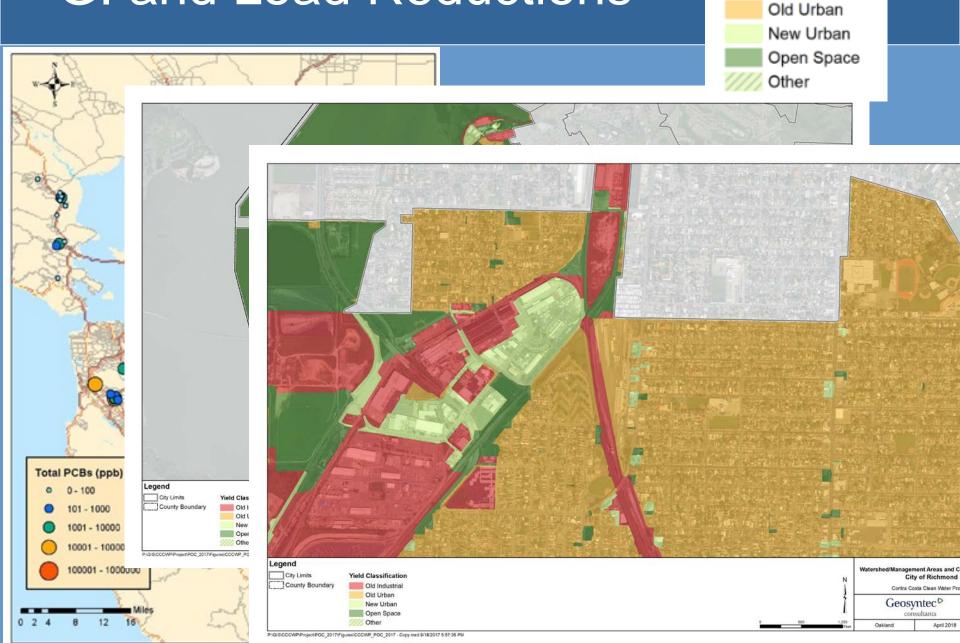
# Related Countywide Planning



## PCBs in San Francisco Bay



#### GI and Load Reductions



Yield Classification

Old Industrial

#### GI Plan Elements

- Projections/Targets for impervious surface converted to GI:
  - Development/Redevelopment
  - Public Infrastructure (retrofits)
- Associated reductions in PCBs & Mercury
- Target dates: 2020, 2030, and 2040
- Project lists and maps
- Tracking of completed projects

## Ancillary GI Plan Elements

- Updates to Related Planning Documents
- Design Guidelines Streetscapes
- Standard Specifications and Details
- Guidance for Sizing GI Facilities
- Funding Strategies
- Policies and Ordinances
- Outreach and Education

## Infrastructure Projects (C.3.j.ii.)

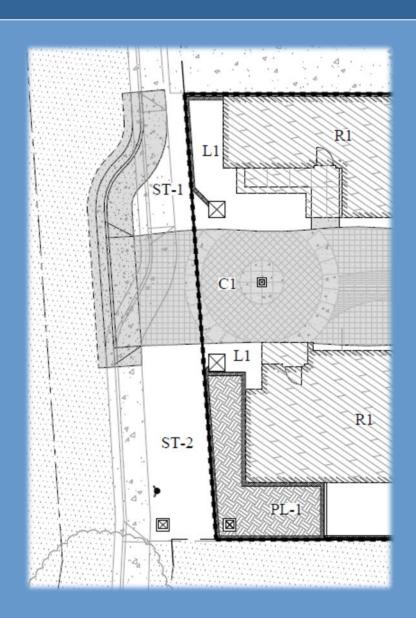
- Ongoing: Screen capital improvement projects for potential to include Green Infrastructure
- Report capital projects reviewed and GI projects planned/constructed
- Regional guidance (May 2016)

## GI Engineering Considerations

- Flat areas near catch basins
- Opportunities to expand tributary area



## Green Infrastructure in Frontage



#### Takeaways

- Integrate LID into Development Review
- Integrate Green Infrastructure into:
  - Multimodal traffic planning
  - Streetscape improvements
  - Street frontage requirements for private development
  - Drainage improvements
- Direct resources to GI Planning
  - Plans due September 2019