PUBLIC WORKSHOP AND CEQA SCOPING MEETING
Nutrient TMDL for Franklin Creek in the Carpinteria Salt Marsh Watershed
Larry Harlan, Melissa Daugherty
Central Coast Regional Water Quality Control Board TMDL Program
September 20, 2017
Agenda

- Introductions
- TMDL Update
- CEQA Scoping
- Adjourn
Impaired Waters

- Franklin Creek impairment due to high nitrate levels
- Marsh impairments for nutrients, organic enrichment/low dissolved oxygen
## Beneficial Uses

<table>
<thead>
<tr>
<th>Beneficial Use</th>
<th>Carpinteria Salt Marsh</th>
<th>Santa Monica Creek</th>
<th>Franklin Creek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal and Domestic Supply (MUN)</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Agricultural Supply (AGR)</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Ground Water Recharge (GWR)</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Water Contact Recreation (REC-1)</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Non-Contact Water Recreation (REC-2)</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Wildlife Habitat (WILD)</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Cold Fresh Water Habitat (COLD)</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Warm Fresh Water Habitat (WARM)</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Migration of Aquatic Organisms (MIGR)</td>
<td>X</td>
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<td>X</td>
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<tr>
<td>Spawning, Reproduction, and/or Early Development (SPWN)</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Preservation of Biological Habitats of Special Significance (BIOL)</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Rare, Threatened, or Endangered Species (RARE)</td>
<td>X</td>
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<td>Estuarine Habitat (EST)</td>
<td>X</td>
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<tr>
<td>Freshwater Replenishment (FRSH)</td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>Commercial and Sport Fishing (COMM)</td>
<td>X</td>
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</tbody>
</table>
Nutrient Pollution…
What are we trying to protect?

- Viable aquatic habitat for fish, wildlife, invertebrates

Photographs:
- Drinking Water Supply
  - Photo Credit: USEPA

- Public nuisances, Risks to public health
  - Photo Credit: City of Watsonville
Water Quality Objectives

Municipal and Domestic Supply (MUN)

- The Basin Plan numeric water quality objective for nitrate (as nitrogen) is **10 mg/L**
- OEHHA Public Public Health Goals (MCLs)
  - 10 mg/L nitrate as nitrogen
  - 10 mg/L for joint nitrate/nitrite as nitrogen
  - 1 mg/L nitrite as nitrogen
Water Quality Guideline

• The Basin Plan contains a nitrate concentration “guideline” of 30 mg/L nitrate as nitrogen to protect the Agricultural Supply (AGR) beneficial use,

• Guideline developed by UC Ag Extension Services to avoid severe problems for sensitive crops (e.g., grapes, avocado, citrus, almonds, and others)
Joint Nitrate/Nitrite Concentrations

Not shown 315FMV maximum concentration of 322 mg/L on 5/14/2006
Not shown 315FMV maximum concentration of 322 mg/L on 5/14/2006
Water Quality Objectives

Biostimulatory Substances (Nutrients)

“Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.”
Box plots of dissolved oxygen concentrations (mg/L).
Example of Nutrient Targets to Prevent Biostimulation and Protect Aquatic Habitat
Potential Nutrient Sources

• Agricultural fertilizers
• Septic systems
• Groundwater (baseflow)
• Urban runoff
• Natural sources (atmosphere, geologic)
• Other???
What’s Next...

• TMDL documents for public review (October 2017)
• Meeting to discuss the TMDL documents (November 2017)
• Public comments due (December 2017)
• Water Board hearing for TMDL (March 2018)
Questions/Comments

Up Next - CEQA Scoping
What is CEQA Scoping?

California Environmental Quality Act (CEQA)

- A statute requiring us to anticipate significant environmental impacts (if any) associated with an action or project, and to identify ways to mitigate those impacts if feasible.

- Early public CEQA scoping is required by regulation:

  23 CCR: CEQA Implementation Regulations, §3775.5
  “Prior to circulating the draft substitute environmental documentation...the board shall seek early public consultation. Early public consultation may include one or more scoping meetings”
Project Description

Adoption of a basin plan amendment to the Water Quality Control Plan for the Central Coastal Basin to incorporate TMDLs and an associated water quality improvement strategy addressing nutrients in Franklin Creek
Early public involvement assists Water Board staff in refining the scope of the TMDL project and determining the range of potentially significant environmental impacts TMDL implementation might have (if any) on environmental resources of the Franklin Creek watershed, and identifying feasible mitigation measures to reduce or minimize those anticipated adverse environmental impacts.
What are Significant Impacts?

Defined by regulation:

A “significant impact” causes a substantial or potentially substantial adverse change in physical conditions within the project area
CEQA “Checklist” Categories

The “checklist” refers to the environmental categories we need to consider. Could there be adverse environmental impact to them? If so, can we mitigate?

1. Aesthetics
2. Agricultural Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Geology and Soils
7. Greenhouse Gas Emissions
8. Hazards & Hazardous Materials
9. Hydrology and Water Quality
10. Land Use and Planning
11. Mineral Resources
12. Noise
13. Population and Housing
14. Public Services
15. Recreation
16. Transportation/Traffic
17. Utilities and Service Systems
18. Cumulative impacts
Example: Denitrification Bioreactor
Example: Denitrification Bioreactor
Example: Denitrification Bioreactor
Example: Denitrification Bioreactor

- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Greenhouse gases
- Etc.
## CEQA Discussion/Brainstorm Table

<table>
<thead>
<tr>
<th>Means of compliance</th>
<th>Env. impacts due to means of compliance</th>
<th>Magnitude of Env. impacts</th>
<th>Alternative means of compliance that reduce Env. impacts</th>
<th>Mitigation measures to reduce Env. impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural BMPs – Bio reactor</td>
<td>Construction type impacts - Land disturbance, removal of ag land uses, air emissions, dust</td>
<td>Could be significant depending on size of project, etc.</td>
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<td>Lined basin to collect returned irrigation h2o</td>
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<tr>
<td>Groundwater infiltration projects</td>
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<tr>
<td>Diversion of water</td>
<td>Reduced flow, habitat loss</td>
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