Indicator Bacteria TMDLs For Tecolote Creek

Public Workshop and CEQA Scoping Meeting

June 8, 2006

Presented by
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Water Resource Control Engineer

Indicator Bacteria TMDLs For Tecolote Creek

Purpose

Inform the public about the project and receive public input/comments

Workshop/Meeting Outline

- Overview of TMDL Development Process
- Tecolote Creek Background
- Tecolote Creek TMDL Development
- CEQA Scoping Meeting
- Questions/Comments

TMDL Development Process Overview

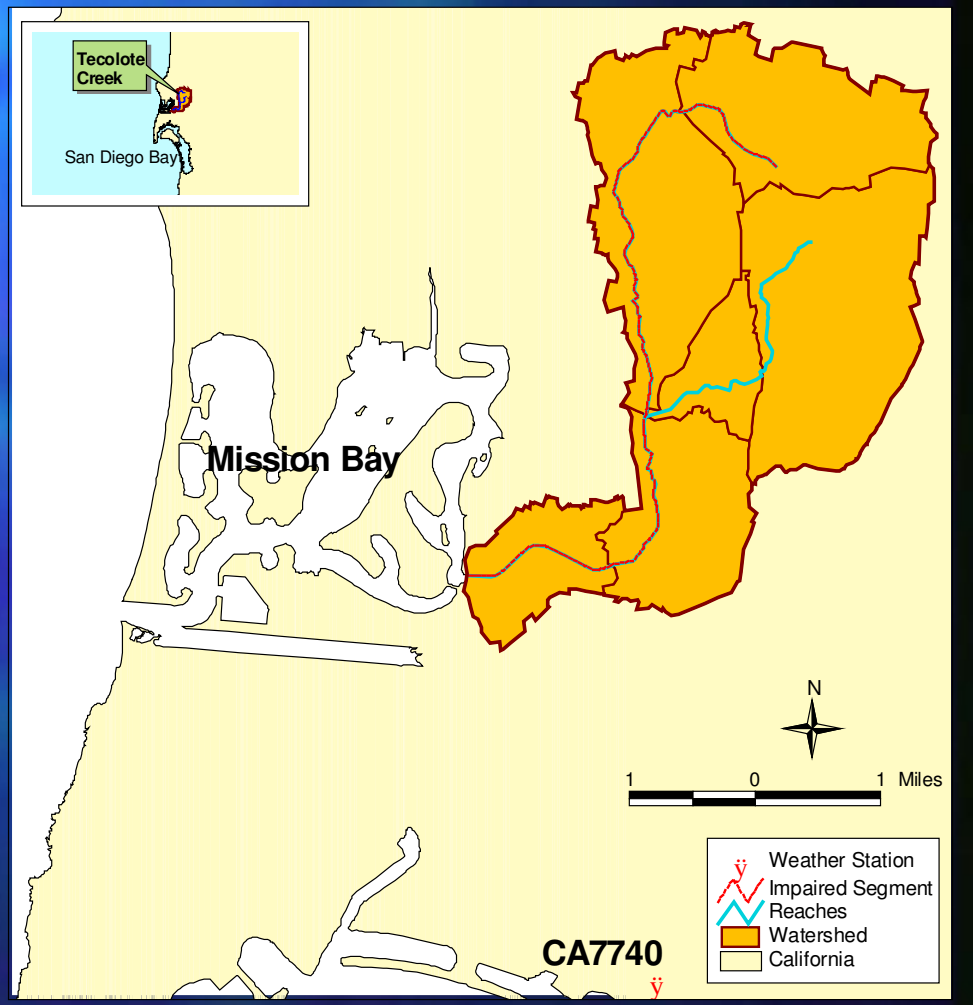
- What is a TMDL?
  - ☞ Total Maximum Daily Load
  - ☞ Plan to restore or protect water quality standards in threatened or impaired waters
  - ☞ TMDL = ΣWLA + ΣLA + MOS
    (Wet and Dry Weather)
- Why do a TMDL?
  - ☞ Clean Water Act Section 303(d)
  - ☞ Meet Basin Plan water quality standards
    - Protect beneficial use
    - Meet water quality objectives (WQOs)

TMDL Development Process Overview

- Technical TMDL Development
  - Problem Statement
  - Numeric Targets
  - Source Analysis
  - Linkage Analysis
  - TMDL
  - Margin of Safety
  - Allocations
- Implementation Plan
  - Incorporate WLAs (point sources) into appropriate permits
  - Compliance with LAs (nonpoint sources) through NPS Program
  - Monitoring
- Resolution/Basin Plan Amendment

Tecolote Creek Background

- San Diego Region
- Listed for bacteria on 303(d) list
- Southern San Diego – Mission Bay
- Approximately 6 miles
- 85-90% Rainfall mid-Oct to early Apr



Tecolote Creek Background

- Approximately 10 square miles
- Land Use
  - 40.9% Low Density Residential
  - 17.4% Agriculture
  - 16.0% Water
  - 7.2% Horse Ranches
  - 5.1% Open Spaces
  - 2.8% Commercial
  - 2.8% Parks/Recreation

Tecolote Creek Background

- 303(d) List
  - Metals
  - Pesticides
  - Bacteria
- WQOs
  - Total Coliform
  - Fecal Coliform
  - Enterococcus
  - E. Coli
- Beneficial Uses
  REC-1, REC-2 (& SHELL)

Tecolote Creek TMDL Development

Problem Statement

Bacteria densities in the waters of Tecolote Creek have exceeded the numeric water quality objectives (WQOs) for total, fecal, and/or enterococci bacteria. These exceedances threaten and/or impair the recreational water contact (REC-1) and recreational non-water contact (REC-2) beneficial uses of Tecolote Creek and the REC-1, REC-2, and shellfish harvesting (SHELL) beneficial uses of Mission Bay (which is fed by Tecolote Creek).

Tecolote Creek TMDL Development

Numeric Targets

- Selected to achieve water quality standards
  - Beneficial uses
  - Water quality objectives
- Numeric targets initially set to numeric water quality objectives

Beneficial Use	Indicator	Wet Weather Targets	Dry Weather Targets
SHELL	Total Coliform	230	70
REC-1	Total Coliform	10,000	1,000
	Fecal Coliform	400	200
	Enterococcus	61	33

- Units in Most Probable Number (MPN) bacteria colonies per 100 milliliters of water (MPN/100ml)
- Wet Weather Targets based on single sample maximum WQOs in Basin Plan
- Dry Weather Targets based on 30-day geometric mean WQOs in Basin Plan

Tecolote Creek TMDL Development

Source Analysis

- Weather Conditions
  - Wet Weather (precipitation)
  - Dry Weather (nuisance flows)
- Land Use
- Point Sources
- Nonpoint Sources

Tecolote Creek TMDL Development

Linkage Analysis

- Bacteria TMDL Project I – Beaches and Creeks
- Weather Conditions
  - Wet Weather Analysis (LSPC/HSPF)
  - Dry Weather Analysis (Statistical)
- Data
  - Stream Flow
  - Water Quality
  - Meteorological
  - Land Characteristics

Tecolote Creek TMDL Development

Linkage Analysis

- Intrinsic MOS (Conservative Assumptions)
- Seasonal Variation (Dry and Wet Weather)
- Existing Loading (Flow x Observed)
- TMDL (Flow x Numeric Targets)
  - Wasteload Allocations (Point Sources)
  - Load Allocations (Nonpoint Sources)
- Load Reductions
- Implementation Plan

Tecolote Creek TMDL Development

Tentative Schedule

- Formation of Stakeholder Advisory Group
  - June 2006 (Today)
- Draft Technical Report
  - Late 2006 to Early 2007
- Draft Implementation Plan
  - Early 2007
- Regional Board Public Hearing
  - Mid to Late 2007

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Questions?

Comments?

California Environmental Quality Act (CEQA)

Purpose of CEQA?

- Develop and maintain a high quality environment now and in the future
  - Identify potential environmental impacts
  - Avoid where possible
  - Mitigate where possible
- Ensure public disclosure & participation

California Environmental Quality Act (CEQA)

When does CEQA apply?

- CEQA applies to "projects" proposed to be undertaken or requiring approval by State and local government agencies
- "Projects" are activities which have the potential to have a physical impact on the environment

California Environmental Quality Act (CEQA)

Basin Planning is a CEQA Project

- Certified regulatory program exempt from requirements of CEQA for preparation of Initial Study and EIR or Negative Declaration [14 CCR §15251(g)]
- State Board CEQA implementation regulations require: technical report, initial draft of Basin Plan amendment, CEQA checklist [23 CCR §3776]

California Environmental Quality Act (CEQA)

CEQA Scope for TMDL Project

- Identify potential environmental impacts
- Identify measures to mitigate these impacts
- Identify alternatives for achieving compliance with TMDL

California Environmental Quality Act (CEQA)

CEQA Checklist:

- Preliminary evaluation of potential environmental impacts of the project
  - Aesthetics
  - Air Quality
  - Biological Resources
  - Hydrology and Water Quality
  - Noise
  - Utilities and Service Systems
- Statement of Overriding Considerations
- Review and submit comments (telephone, fax, e-mail, mail)

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Questions?

Comments?

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