

## San Francisco Bay Beaches Pathogen TMDL



Crissy Beach www.parkconservancy.org



### Public Workshop & CEQA Scoping Meeting

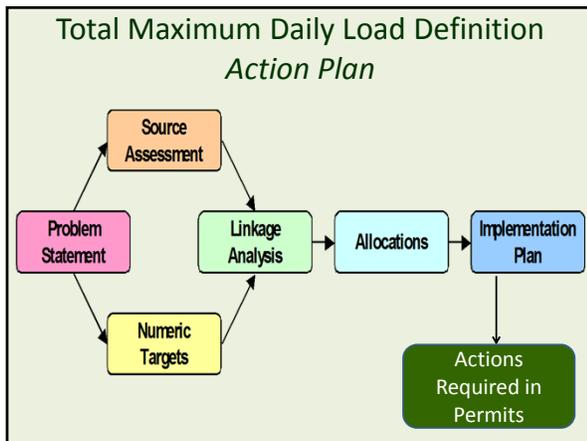
Sept. 29, 2014

## Part I: Workshop Topics

- TMDL Definition ←
- Project Scope & Approach
- Data / Potential Sources
- Implementation Actions
- Monitoring & Reevaluation



McNears Beach  
Marin Co Parks photo



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## Project Scope

Excessive bacteria at SF Bay beaches:

- China Camp
- McNears
- Crissy Field
- Aquatic Park
- Candlestick Point beaches (3)
- Marina Lagoon beaches (2)



## Approach

### Basin Plan Objectives for Bacteria

Beneficial Use	Fecal Coliform (MPN/100mL)	Total Coliform (MPN/100mL)	Enterococcus (MPN/100mL) <sup>b</sup>
Water	Geo. Mean <sup>c</sup>	Geo. Mean <sup>c</sup>	Geo. Mean <sup>c</sup>
Contact Recreation (REC-1)	90 <sup>th</sup> percentile < 400	No sample > 10,000	< 35 No sample > 104

a. Most Probable Number (MPN) is a statistical representation of the results of the standard coliform test.  
 b. Applicable to marine and estuarine waters only.  
 c. Based on a minimum of five consecutive samples equally spaced over a 30-day period.

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	Location	# Data points	# Samples exceeding Single Sample Actx (%)	# Samples exceeding Geometric Mean (%)
Enterococcus	Crissey East	387	55 (14.2%)	77 (20.1%)
	Crissey West	331	12 (3.6%)	13 (4.0%)
	Crissey East	387	3 (0.8%)	17 (4.4%)
Total Coliform	Crissey West	331	6 (1.8%)	20 (6.0%)
	Crissey East	387	15 (3.9%)	2 (0.5%)
E.coli <sup>+</sup>	Crissey East	331	7 (2.1%)	1 (0.3%)

### Data & Potential Sources



### Crissey Field Beach



- 20% Enterococcus exceedance at East sample location
- Wet weather exceedances predominate
- Watershed runoff flows largely to Crissey Marsh-discharges to east end
- Leaking sewer piping possible
- Pet waste possible, but only at east end?

### Aquatic Park Beach



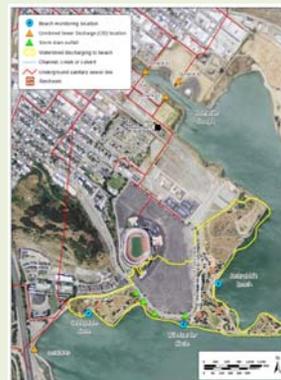
- 19% Enterococcus, 24% total coliform exceedances at Station 211 only
- Wet weather exceedances predominate
- Combined sewer → small watershed
- Leaking sewer piping possible, likely?
- Boat waste possible
- Pet waste possible

### Candlestick Park – Jackrabbit Beach



- 20% Enterococcus exceedance
- Wet weather exceedances predominate
- Small watershed → less urban runoff
- Leaking sewer piping possible
- Pet / bird waste possible

### Candlestick Park – Windsurfer



- 63% Enterococcus, 74% Total Coliform, 27% E.coli exceedances
- Mostly wet weather exceedances, some dry
- Small watershed outfall, but changing land use
- Leaking sewer piping possible
- Pet/bird waste possible

### Candlestick Park – Sunnydale



- 48% Enterococcus, 67% total coliform exceedances
- Wet weather exceedances predominate
- Small watershed → less urban runoff
- Leaking sewer piping possible
- Pet/bird waste possible

### Marina Lagoon – Parkside Aquatic & Lakeside Rec Center



- ~55% Enterococcus; 97% Total Coliform; 40% Fecal Coliform exceedances - both beaches
- Wet weather exceedances predominate
- 10 mi<sup>2</sup> watershed → much urban runoff
- Leaking sewer piping known
- Boat waste likely but small contributor
- Engineered system (tide gate)

### McNears Beach



- 40% total coliform exceedance
- Data collected April-Oct., missing 2009-12
- Small watershed → less urban runoff
- Leaking sewer piping possible
- Pet waste minimal, but geese present

### China Camp Beach



- 36% total coliform exceedance
- Data collected April-Oct.
- Small watershed → less urban runoff
- Leaking sewer piping, minimal?
- Pet waste, wildfowl

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McNears Beach  
Marin Co Parks photo

Source	Possible Implementation Actions	Responsible Party
Sanitary Sewer Collection Sys.	ID & repair problem areas, lateral repair program	City, Public Utility, Residents, Businesses
Urban Runoff	Stormwater mgmt actions, e.g., drain cleaning; diversion; infiltration; remove litter & homeless camps; horse facilities; public education	City, County, other
Pets	Bans, "leash laws," education	Beach Authority
Boats	Tighter inspection or patrols, bans, add pump-out facilities	Harbor Authority
Stagnant water	Increase flows of managed systems (e.g., Marina Lagoon)	City / Corps of Engineers
Other	Discuss	

## Monitoring & Reevaluation

To measure progress and make adjustments

Water Quality Monitoring

- Where are specific sources of bacteria?
- Is water quality improving?
- Are implementation actions effective?

Compliance Reporting

- Are implementation actions being implemented?



Lakeside Rec Park, San Mateo

## Part 2: CEQA Scoping Meeting

### San Francisco Bay Beaches Pathogen TMDL



Aquatic Park, SF, NPS photo



September 29, 2014

## Part 2: CEQA Scoping Meeting Topics

- Definitions ←
- CEQA process for TMDLs
- Scope of Environmental Review
- Schedule / Input



McNears Beach  
Marin Co Parks photo

## Definitions

- CEQA = California Environmental Quality Act
- TMDL = Total Maximum Daily Load
- Basin Plan = master policy document, describes legal, technical, and programmatic bases of water quality regulation in the Region



Crissey Beach www.parkconservancy.org

## CEQA Process for TMDLs

- Under CEQA, Basin Plan programs are approved certified programs, exempt from preparing an EIR, Negative Declaration, or Initial Study
- Water Board prepares an Environmental Checklist, includes this review in Basin Plan Amendment approval packet (staff report)



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McNears Beach  
Marin Co Parks photo

### Scope: Required Elements

- Identify potential adverse environmental impacts that could result from actions taken in response to the Bacteria TMDL
- Discuss alternatives to proposed TMDL Basin Plan Amendment
- Identify mitigation measures to reduce severity of potential impacts
- Provide full public disclosure of documents and decision-making process



### Scope: Effects To Be Considered

**Will Consider:**

- Direct physical changes in environment
  - Excavation & grading impacts
  - Noise and Air Quality impacts from minor construction
- Short-term and long-term impacts

**Will not consider:**

- Speculative changes
- Changes that would occur regardless of the TMDL



A.P. Photo, Gulf of Mexico

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Other	<i>Discuss</i>	

### Environmental Considerations

- TMDL's purpose – improve water quality
- Actions to improve water quality may adversely affect other aspects of the environment



CEQA evaluation will consider potential adverse impacts of actions taken to comply with the TMDL

Marina Lagoon

### Environmental Checklist Topics

- Aesthetics
- Agricultural resources
- Air quality
- Biological resources
- Cultural resources
- Geology/soils
- Greenhouse gas emissions
- Hazards & hazardous materials
- Water quality and hydrology

- Land use/planning
- Mineral resources
- Noise
- Population/housing
- Public services
- Recreation
- Transportation/traffic
- Utilities/service delivery systems



### Examples of Possible Impacts

- Sewer main repair or lateral repair to reduce sewer system overflows
- Construction of stormwater infiltration / treatment facilities
  - Construction would be limited in time and intensity to meet local noise ordinance requirements
  - Are other mitigation measures needed?
- Can you think of other impacts?





### Likely Level of Impact

- Construction-related Air Quality Impacts:
  - Minor, temporary air quality emissions from local repairs and construction would result in short term “less than significant impacts”
- Construction-related Noise Quality Impacts:
  - Minor, temporary noise emissions from earth moving equipment would result in short term “Less than significant impacts”
- Not anticipating significant adverse impacts



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### Project Schedule

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CEQA Scoping Meeting ← We are here

CEQA Comments Due Oct. 31, 2014

Proposed TMDL, Environmental Checklist – Spring 2015

Public Review & Comment – Summer 2015

Water Board Hearings – Fall 2015

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### Submit CEQA Scoping Comments:

**By October 31, 2014**

**To: Jan O’Hara**  
 S.F. Bay Water Board  
 1515 Clay Street, Suite 1400  
 Oakland, CA 94612

**[JOHara@waterboards.ca.gov](mailto:JOHara@waterboards.ca.gov)**



Project web page:  
[http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/TMDLs/SFbaybeachespathogens.shtml](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/SFbaybeachespathogens.shtml)

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