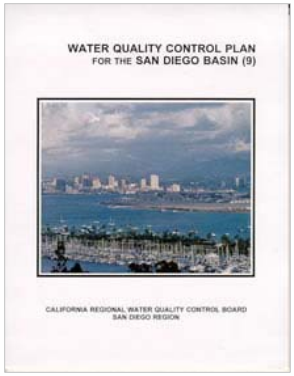
Public Workshop and CEQA Scoping Meeting



Amendment to the Basin Plan to incorporate implementation provisions for a **'reference system/ antidegradation approach'** and a **'natural sources exclusion approach'** for indicator bacteria water quality objectives (Basin Plan Issue No. 7).

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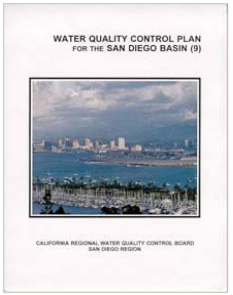
California Regional Water Quality Control Board,
San Diego Region
March 13, 2006

To Receive Information:

Electronic mail list

Basin Planning Issues

http://www.waterboards.ca.gov/sandiego/misc/mailing_lists.html



← Download Basin Plan.

www.waterboards.ca.gov/sandiego/programs/basinplan.html

Public Workshop and CEQA Scoping Meeting

- Overview.
- CEQA & Basin Planning Process.
- Public comments.

Basin Plan

- Governing regulatory and planning document to State and Federal clean water programs.
  - Defines state waters, designates beneficial uses, establishes WQOs, describes implementation plan, and surveillance and monitoring activities to achieve WQOs.

A little history:

- Basin Plan Triennial Review.

http://www.waterboards.ca.gov/sandiego/programs/tri_review.html

  - Issue No. 7. Water quality objectives for indicator bacteria
    - Part 1 → California's bacteria policy being updated by State Water Board.
    - Part 2 → this Basin Plan amendment →

Basin Plan Amendment – Issue 7

- Add implementation provisions for exceedances of SSM indicator bacteria for wet weather TMDLs.

Basin Plan Amendment – Issue 7

USEPA BACTERIOLOGICAL CRITERIA FOR WATER CONTACT RECREATION (in colonies per 100 ml)			
	Freshwater		*Saltwater*
	Enterococci	*E. coli*	*Enterococci*
Steady State Geometric Mean Indicator Density			
(all areas)	***33***	***126***	***35***
Single Sample Maximum Allowable Density			
(designated beach)	***61***	***235***	***104***
(moderately or lightly used area)	***108***	***406***	***276***
(infrequently used area)	***151***	***576***	***500***

Basin Plan Amendment – Issue 7

- Reference system/ antidegradation approach, or a
- Natural sources exclusion approach for single sample maximum bacteria objectives.

Basin Plan Amendment – Issue 7

- Reference system/ antidegradation approach used in wet weather TMDLs
  - San Monica Bay beaches
  - Malibu Creek watershed
  - San Diego Region beaches & creeks
- Wet weather defined as > 0.2 inches of rain, plus 72 hours that follow the rain event.

Basin Plan Amendment – Issue 7

Wet Weather – All beaches (Deer Ck, Leo Carillo, Dan Blocker, San Onofre)

	Total coliform	Fecal coliform	Entero-coccus	T:F	Any indicator
< 24 hrs	13	20	20	7	**27**
Day 1-2	7	13	13	7	**20**
Day 3	-	-	7	7	**7**

Frequency of exceedance for fecal indicator bacteria during wet weather within 24 hrs, within 1 or 2 days, and within 3 days of rainfall at 4 reference beaches (Schiff et al., 2005).

Basin Plan Amendment – Issue 7

- Reference system/ antidegradation approach recognizes that a certain frequency of samples will exceed single sample maximum bacterial objective
  - Based on observed exceedance frequency in selected reference system or the targeted waterbody, whichever is less.

Basin Plan Amendment – Issue 7

- Reference system → beach and upstream watershed minimally impacted by human activities.

Basin Plan Amendment – Issue 7

- What is the appropriate exceedance frequency for the reference system approach?
  - Results from studies of indicator bacteria at reference beaches during wet weather in southern California →

Basin Plan Amendment – Issue 7

Wet Weather	**TC**	***E. coli***	**Enter-coccus**	**T:F**	**Any indicator**
Deer Creek	0	0	0	0	0
Leo Carrillo	0	6.3	12.5	18.8	25.0
Dan Blocker	6.3	12.5	12.5	0	18.8
San Onofre	25.0	25.0	33.3	0	33.3
All beaches	**6.7**	**10.0**	**13.3**	**5.0**	**18.3**

Frequency of exceedance for fecal indicator bacteria during wet weather (**up until 3 days after rainfall**) at reference beaches (Schiff et al., 2005).

Basin Plan Amendment – Issue 7

- Natural sources exclusion approach recognizes that a certain frequency of samples will exceed single sample bacteria objectives.
  - Based on residual exceedance frequency in specific waterbody after all anthropogenic sources of bacteria have been controlled.
  - Does not involve comparison of a urban watershed with a reference system.

Basin Plan Amendment – Issue 7

- These approaches are intended to provide load allowances for natural sources of bacteria from developed watersheds.

Basin Plan Amendment – Issue 7

- What are the research needs?
  - Information on many reference systems.
    - Reference lagoons and bays.
    - Freshwater streams.
  - Flow and water quality data.
  - Understand and quantify bacterial regrowth in pipes and hydromodified stream segments.

Basin Plan Amendment – Issue 7

- How has the bacteria exceedance frequency been applied in TMDLs?
  - San Diego Region Beaches & Creeks bacteria TMDL → exceedance days expressed as allowable exceedance load.
  - Santa Monica Bay bacteria TMDL → Waste Load Allocation expressed as exceedance days per winter wet season.

Basin Planning Documents

- Environmental Review – CEQA.
  - Technical report.
  - Initial draft of Basin Plan amendment.
  - Environmental checklist form.
    - No significant environmental effects.

Basin Planning Process

- CEQA Scoping Meeting and Public Workshop - March 13, 2006.
- Peer Review.
  - Review scientific foundation for BPA.
  - Technical Advisory Group?
    - Early input on BPA & draft technical report.
    - Provide input on issues to be considered for scientific peer review.

Basin Planning Documents

- Draft Technical Analysis ~ 6 months.
  - Draft Technical Report.
    - Rationale and need for proposed changes;
    - Explanation of required CEQA analysis and considerations;
    - CEQA checklist; and
    - Economic analysis.
  - Tentative Resolution & Basin Plan Amendment.

Basin Planning Process

- Public review & comment (45-day).
- Public hearing.
- Written response to comments.
- Possible adoption of proposed amendment.

Basin Planning Process

- State Water Board
  - review for consistency with statewide plans and policy.
  - hearing and approval.
- Office of Administrative Law
  - review for compliance with administrative procedures and approval.
- U.S. Environmental Protection Agency
  - review and approval for consistency with federal regulations.

Basin Plan Amendment – Issue 7

Basin Plan Amendment – Issue 7

References

- (Beaches and Creeks in the San Diego Region Bacteria TMDL)
  - California California Regional Water Quality Control Board, San Diego Region. 2005. Total Maximum Daily Loads for Indicator Bacteria, Project I – Beaches and Creeks in the San Diego Region. 9 Dec 2005. California Regional Water Quality Control Board, San Diego Region, San Diego, CA.

<http://www.waterboards.ca.gov/sandiego/>

Basin Plan Amendment – Issue 7

References

- (Santa Monica Bay Bacteria TMDL)
  - California California Regional Water Quality Control Board, Los Angeles Region. 2002. Total Maximum Daily Load to Reduce Bacterial Indicator Densities at Santa Monica Bay Beaches During Wet Weather. California Regional Water Quality Control Board, Los Angeles Region, Los Angeles, CA.

<http://www.waterboards.ca.gov/losangeles/>

Basin Plan Amendment – Issue 7

References

- Schiff et al. 2005. Microbiological Water Quality at Reference Beaches in Southern California During Wet Weather. Southern California Coastal Water Research Project, Tech. Rpt. #448.

<http://www.sccwrp.org/pubs/techrpt.htm>