

# Public Workshop

## 2014 Central Coast Water Board's Clean Water Act Sections 303(d) and 305(b) Integrated Report

September 14, 2016



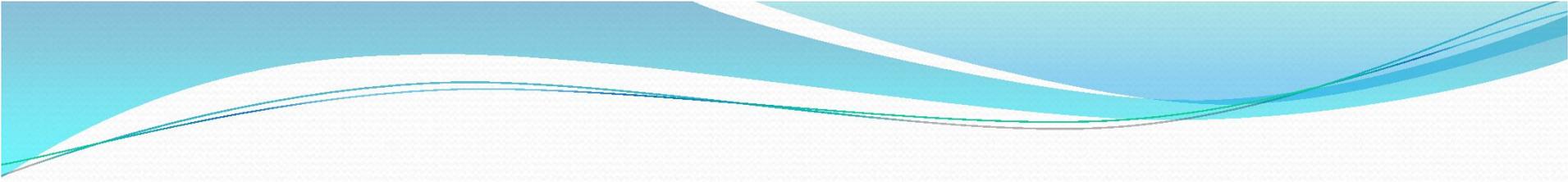
# Today's Agenda

- Introductions and Logistics
- Presentation of Central Coast Water Board's 2014 Integrated Report
- Public Input



# Outline

- Purpose of Today's Workshop
- Requirements
- Integrated Report Assessment Process
- Assessment Process Timeline
- Assessment Results
- Next Steps



# Purpose of the Workshop

Introduce for public review and comment  
the updates to the Clean Water Act Sections 303(d) List  
and 305 (b) Report (the Integrated Report) for the  
Central Coast Region

[http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/tmdl/303d\\_list.shtml](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/303d_list.shtml)

Public Comment Period Ends September 23, 2016



# Clean Water Act Requirements

## Section 303(d) Requires States to

- Develop a list of waterbodies that are polluted (the 303(d) List)
- Submit the List to USEPA for approval
- Establish Total Maximum Daily Loads (TMDLs) or TMDL alternatives



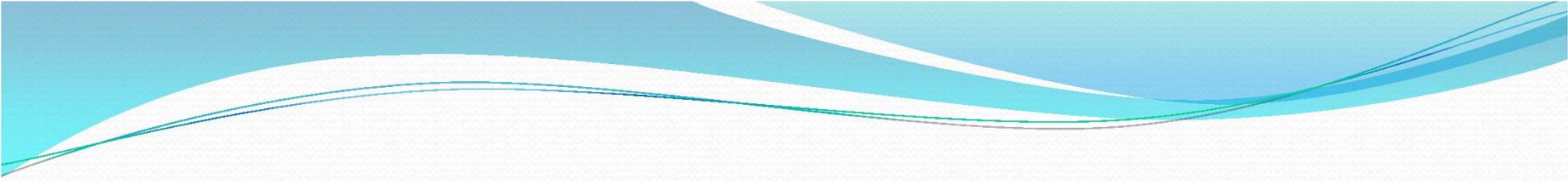
# Clean Water Act Requirements

Section 305(b) Requires States to

- Report to USEPA on the conditions of its waters every other year (the 305(b) Report)

USEPA compiles the state's assessment reports into their biennial "National Water Quality Inventory Report" to Congress

Changes to the 305(b) Report do not require USEPA approval.



## 2005 New Direction from USEPA

Develop a single, state-wide Integrated Report  
to meet the requirements of  
Clean Water Act Sections 303(d) and 305(b)



# Integrated Report Assessment Process



# Integrated Report

## 303(d) Assessment

Is the waterbody polluted?

As defined by the Listing Policy

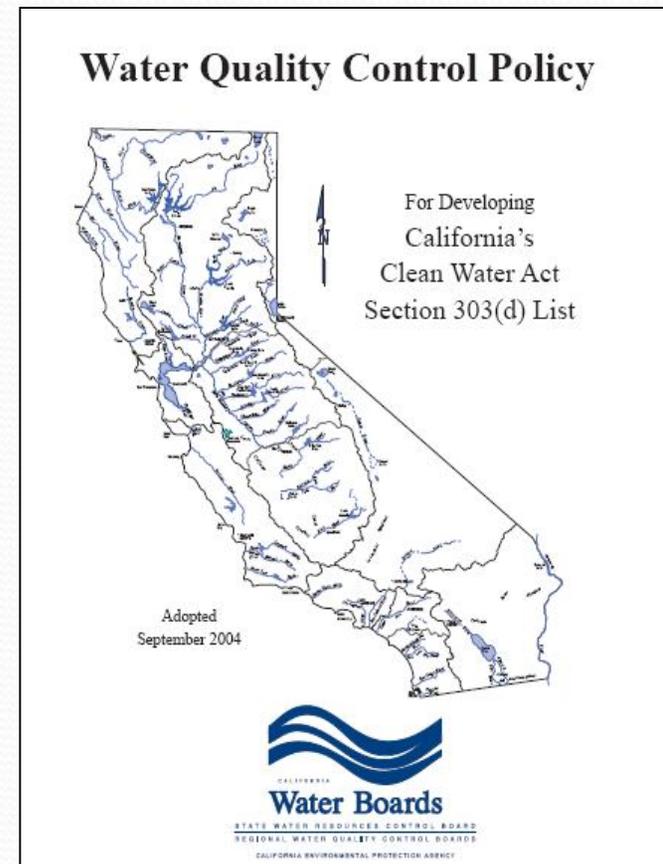
## 305(b) Assessment

Are the Beneficial Uses supported?

# California's Policy for Developing the 303(d) List

## The "Listing Policy"

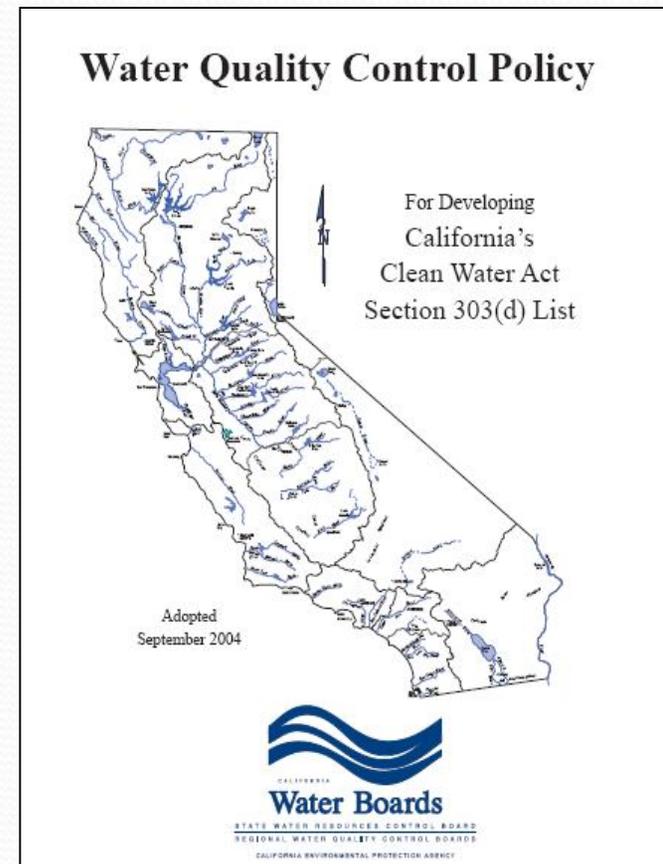
1. Gather Available Data
2. Evaluate Data Quality/Utility
3. Identify Relevant Criteria
4. Develop Lines of Evidence
  - Compare all data to all criteria
  - Summarize data assessment
5. Develop Decisions (Fact Sheets)
  - Determine 303(d) List status
  - Define TMDL development schedule



# California's Policy for Developing the 303(d) List

## The "Listing Policy"

6. Opportunity for Public Review and Comment
7. Approval by Regional Water Boards and State Water Board





# Public Data Solicitation

- Gather all readily available data and information
  - January 14, 2010 – August 30, 2010

# What about all the data collected since August 2010?

- Data collected after August 2010 **AND** submitted to California Environmental Data Exchange Center (CEDEN)
  - Will be assessed in the next cycle of 303(d) updates
    - Central Coast Region scheduled for 2020
- Exceptions to the rule
  - Data that **cannot be** submitted to CEDEN



# Identify Relevant Criteria

- Central Coast Basin Plan Objectives
- Ocean Plan
- California Toxics Rule Criteria
- California Code of Regulations (e.g. Title 22, MCLs)
- Evaluation Guidelines that meet rules of the Listing Policy

# Central Coast Water Board

## Evaluation Guidelines for Nitrate

- California Numeric Nutrient Endpoint Tool and data region wide
  - Risk based approach
  - Meets Listing Policy requirements
  - Protective of aquatic life uses
- Nitrate exceeds 1.0 mg/L (NO<sub>3</sub> as N) **AND** supporting evidence

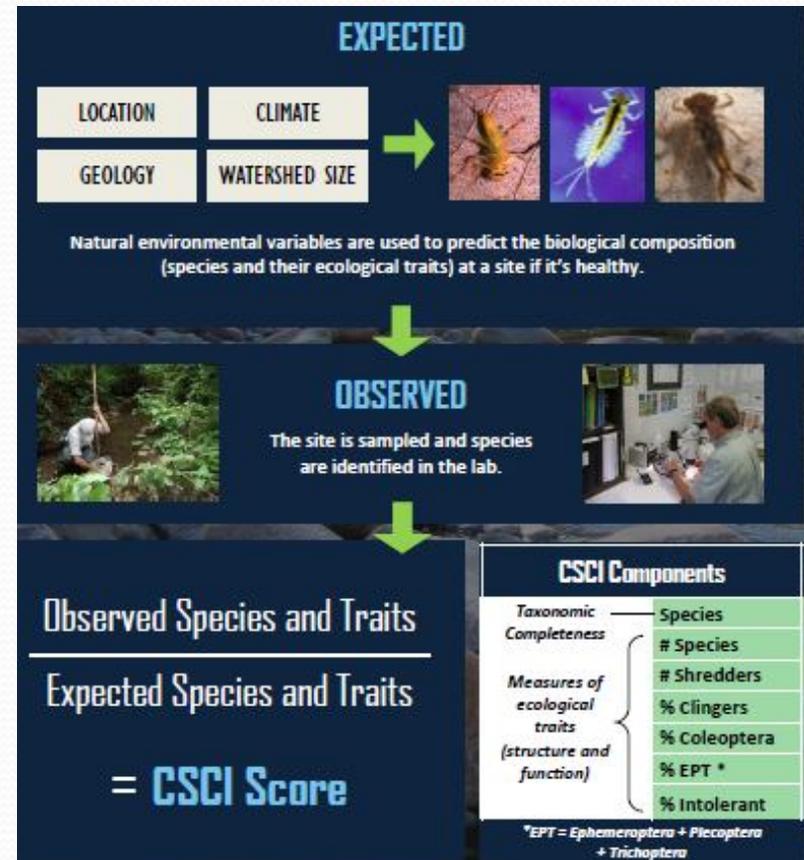
# California's Evaluation Guidelines for Benthic Invertebrate Community

- Determine waterbody health using stream inhabitants
  - Indices of healthy communities
    - Meets Listing Policy requirements
    - Applicable to aquatic life uses
  - Biological communities are sensitive to
    - Instream chemistry
    - Physical conditions
    - Habitat

# California's Evaluation Guidelines for Benthic Invertebrate Community

## California Stream Condition Index

- Applicable Statewide
- Score > 0.92  
Similar to Reference
- Score < 0.79  
Likely Impaired



# California's Evaluation Guidelines for Benthic Invertebrate Community

## Southern California Index of Biotic Integrity

- Regionally scaled Multi-metric Index
- Score >56, Similar to "Least Disturbed"
- Score < 40, Likely Impaired

# California's Evaluation Guidelines for Benthic Invertebrate Community

- New for the 2014 Integrated Report
  - Statewide Index used over Regional Index where available
  - Add to 303(d) List when
    - Available scores showing benthic community is "Likely Impaired"  
AND  
Additional data showing aquatic life uses are not supported

# Develop Lines of Evidence

Summarize data

- Where?
- What pollutant?
- Which water quality standards apply?
- How many samples?
- How many exceed protective limits?



## Develop Decisions (Fact Sheets)

- Combine Lines of Evidence into Fact Sheets
- Determine 303(d) List Status
- For Waterbody/Pollutants on the 303(d) List
  - Establish the TMDL development schedule
  - Where sources are identified, provide them in the 303(d) List



# Integrated Report

303(d) Assessments

Is the waterbody polluted?

305(b) Assessment

Are the Beneficial Uses Supported?



## 305(b) Water Quality Condition Report

For each waterbody and all Beneficial Uses

- Assigned one of three “use ratings”
  - Fully Supporting
  - Insufficient Information
  - Not Supporting
- Based on the minimum sample count requirements of the Listing Policy
  - 16 samples for toxins
  - 26 samples for conventionals

# Integrated Report Categories

**1 - Uses are Fully Supported.**

2 - There is insufficient information to determine beneficial use support.

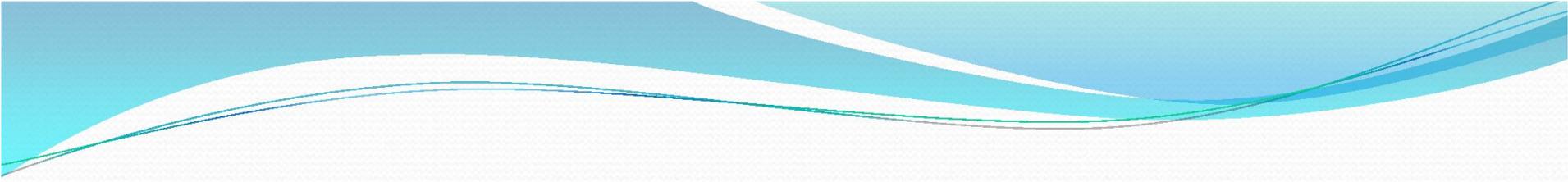
3 - There is insufficient information to determine beneficial use support BUT beneficial uses may be threatened.

**4a - At least one beneficial use is not supported BUT all are addressed by TMDLs.**

**4b - At least one beneficial use is not supported BUT all are addressed another regulatory program.**

**4c - At least one beneficial use is not supported BUT it is not caused by a pollutant.**

**5 - At least one beneficial use is not supported and a TMDL is needed.**



# Integrated Report Assessment Timeline

# State's Assessment Timeline

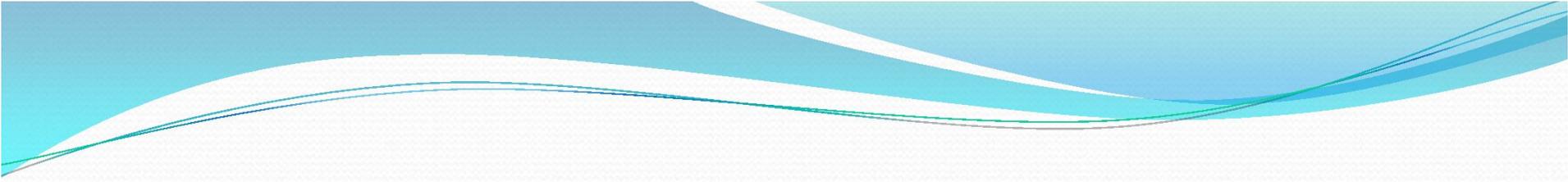
Integrated Report Cycle	Regional Water Board Groups
2012 Integrated Report Approved by USEPA on July 30, 2015	North Coast Water Board Lahontan Water Board Colorado River Basin Water Board
2014 Integrated Report (in process, estimated approval December 2016)	Central Coast Water Board Central Valley Water Board San Diego Water Board
2016 Integrated Report (In process, estimated approval June 2017)	San Francisco Bay Water Board Los Angeles Water Board Santa Ana Water Board

# Central Coast Water Board Assessment Timeline

Time Period	Task
January 14, 2010 - August 30, 2010	Gather available data (Public Data Solicitation)
September 2010 - October 2013 & March 2015 - September 2015	Identify relevant Water Quality Objectives and Evaluation Guidelines and develop Lines of Evidence
September 2015 - August 2016	Central Coast Water Board staff assess data, develop fact sheets and complete draft recommendations

# Central Coast Water Board Assessment Timeline

Time Period	Task
September 14, 2016	Public Workshop to receive public comments
September 23, 2016	Public Comment Period ends
December 8-9, 2016	Central Coast Water Board Public Hearing
TBD	State Water Board Public Hearing
TBD	USEPA review and approval



Assessment Results  
for the  
2014 Central Coast Water Board  
Integrated Report

# Assessment Results

## 2014 303(d) List

- How Much Data was Assessed?
- Any New De-listings?
- Any New Listings?
- What Pollutants?
- Which Watersheds?

# 2014 303(d) List Assessment Results

## 388 Waterbody Segments Assessed



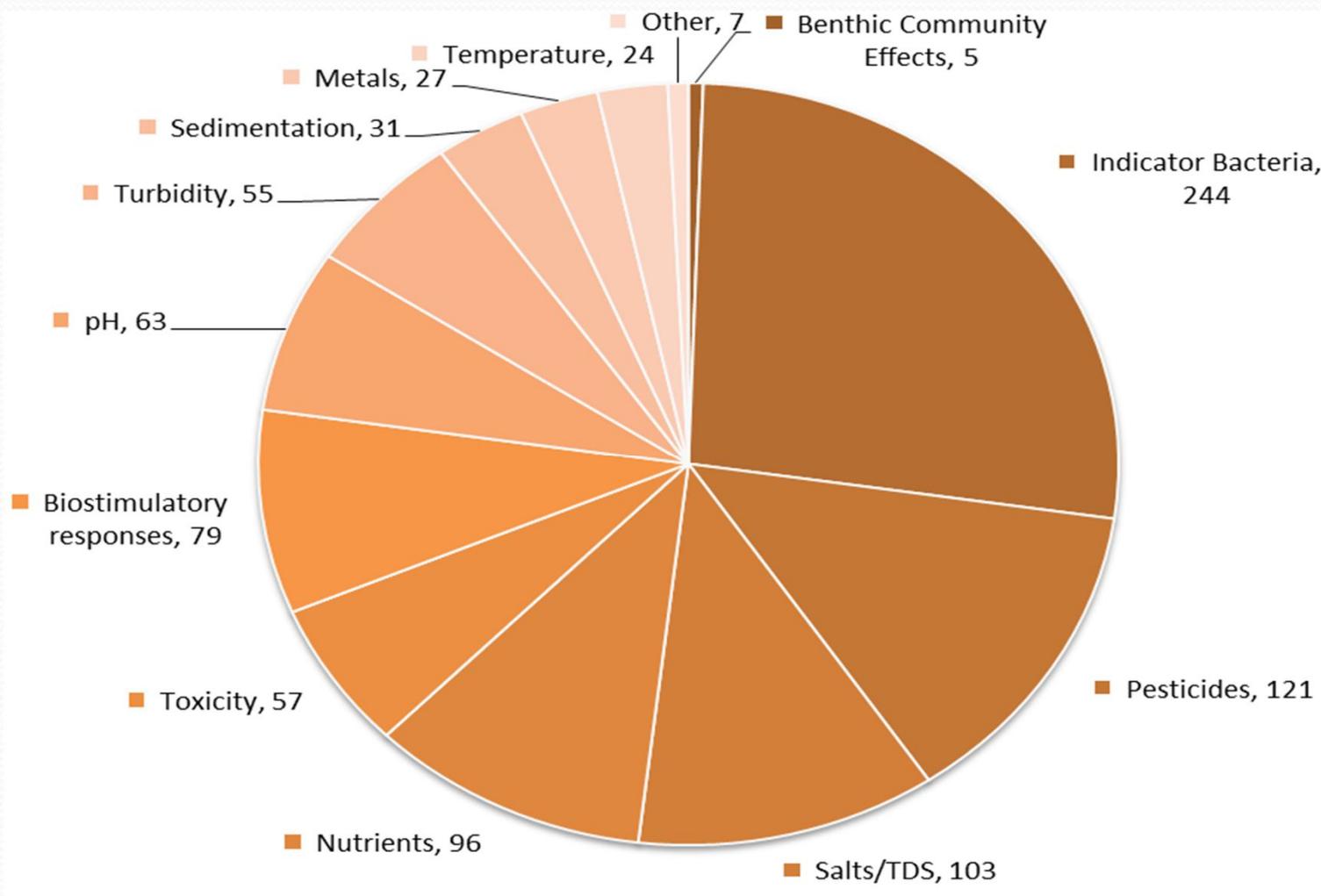
# Assessment Results

## 2014 303(d) List

- 91 Recommendations to De-List
  - 34 due to attainment of water quality standards

# Assessment Results

## 2014 303(d) List Pollutant Groups



# Assessment Results

## 2014 303(d) List Potential Sources

Potential Sources	Percent of Listings	Number of Listings
Grazing	3%	28
Collection System Failure	5%	47
Natural Sources	13%	114
Urban/Storm Water	13%	118
Domestic Animals / Livestock	14%	126
Agriculture	21%	191
Source Unknown*	66%	604

New for 2014 - sources are only identified when a source analysis (such as a TMDL) has been completed and approved.

# Assessment Results

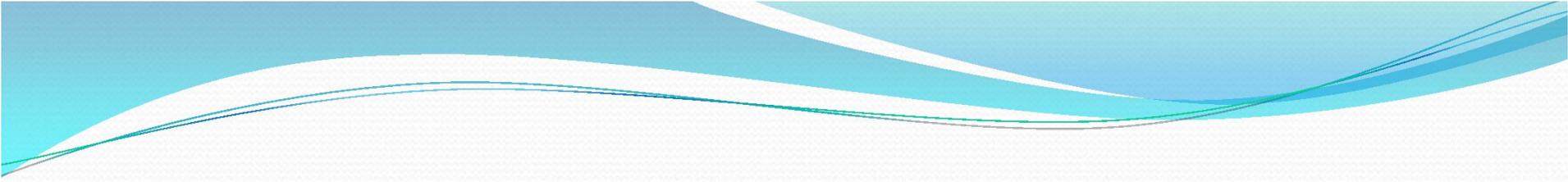
## 2014 303(d) List vs Previous 303(d) Lists

	2014	2008/2010	2006
Number of Lines of Evidence	23,054	11,719	382
Number of Fact Sheets	5,430	3,640	286
Number on 303(d) List	912	712	222

# Assessment Results

## 2014 303(d) List vs Previous 303(d) Lists

- What Changed?
  - More data available
  - Categorical pollutants replaced by specific pollutants
  - Toxicity fact sheets combine sediment & water data
  - Waterbody segments split/re-mapped



# New or Unique Assessments in the Central Coast Region

# Central Coast Water Board

## Evaluation Guidelines for Nitrate

- Developed using the California Numeric Nutrient Endpoint Tool and CCAMP data region wide
- Nitrate exceeds 1.0 mg/L ( $\text{NO}_3$  as N) **AND** supporting evidence of, or risk for, biostimulatory conditions
  - Dissolved oxygen
  - Chlorophyll a
  - Algal mats
  - NNE model predictions based on local conditions

# Central Coast Water Board

## Evaluation Guidelines for Nitrate

### Ten new Listings

- Arroyo Grande (Below Lopez Lake)
- Atascadero Creek (SB County)
- Carneros Creek (Elkhorn Slough Watershed)
- Carpinteria Creek
- Elkhorn Slough
- Millers Canal (Pajaro Watershed)
- Rincon Creek
- Salsipuedes Creek (Santa Cruz County)
- Moro Cojo Slough
- Watsonville Slough

# California's Evaluation Guidelines for Benthic Invertebrate Community

- Assess Aquatic Life Health Using Stream Inhabitants
- Add to 303(d) List when  
Index score shows benthic community is "Likely Impaired"  
AND  
Additional data indicates aquatic life uses are not supported

# 2014 Central Coast Water Board Benthic Invertebrate Community

- 42 waterbody segments assessed
- 5 added to the 303(d) List
  - Arroyo Grande (below Lopez Lake)
  - Atascadero Creek (Santa Barbara County)
  - Chorro Creek
  - Salinas River (lower)
  - San Luis Obispo Creek (below Osos Street)



# Assessment Results

## TMDL Prioritization



# Assessment Results

## 303(d) List TMDL Prioritization

- Draft 2014 303(d) List for the Central Coast Region
  - 912 waterbody segment and pollutant combinations
- TMDL Development Schedule
  - 33% are already being addressed by an approved TMDL
  - By 2023, 51% should be addressed by a TMDL

# Assessment Results

## 303(d) List TMDL Prioritization

<b>TMDL Completion Date</b>	<b>Priority for TMDL Completion</b>	<b>Number of Listings</b>
2018	Highest	59
2023	Medium	114
2027	Low	441



# 2014 Central Coast Water Board Integrated Report

303(d) Assessments

Is the waterbody impaired by a pollutant?

305(b) Assessment

Are the Beneficial Uses Supported?

# Assessment Results

## 305(b) Water Quality Condition Report

For each waterbody, all Beneficial Uses that are assessed are assigned one of three ratings....

- Fully Supporting
- Insufficient Information
- Not Supporting

# Assessment Results

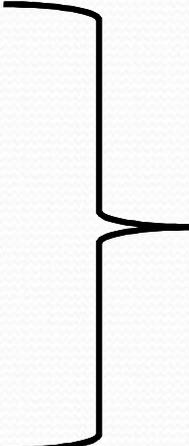
## 305(b) Water Quality Condition Report

- Beneficial Use ratings for a waterbody are combined to determine a single category for that waterbody
  - Example Waterbody
  - Beneficial Use Ratings
    - Nitrate – Fully Supporting
    - Water Temperature – Fully Supporting
    - Toxicity – Insufficient Information
    - Fecal Coliform – Not Supporting

# Assessment Results

## 305(b) Water Quality Condition Report

- Example Waterbody
- Beneficial Use Ratings
  - Nitrate – Fully Supporting
  - Water Temperature – Fully Supporting
  - Toxicity – Insufficient Information
  - Fecal Coliform – Not Supporting
- TMDL status – TMDL Required



Category  
Designation  
= Category 5

# Integrated Report Categories

**1 - Uses are Fully Supported.**

2 - There is insufficient information to determine beneficial use support.

3 - There is insufficient information to determine beneficial use support BUT beneficial uses may be threatened.

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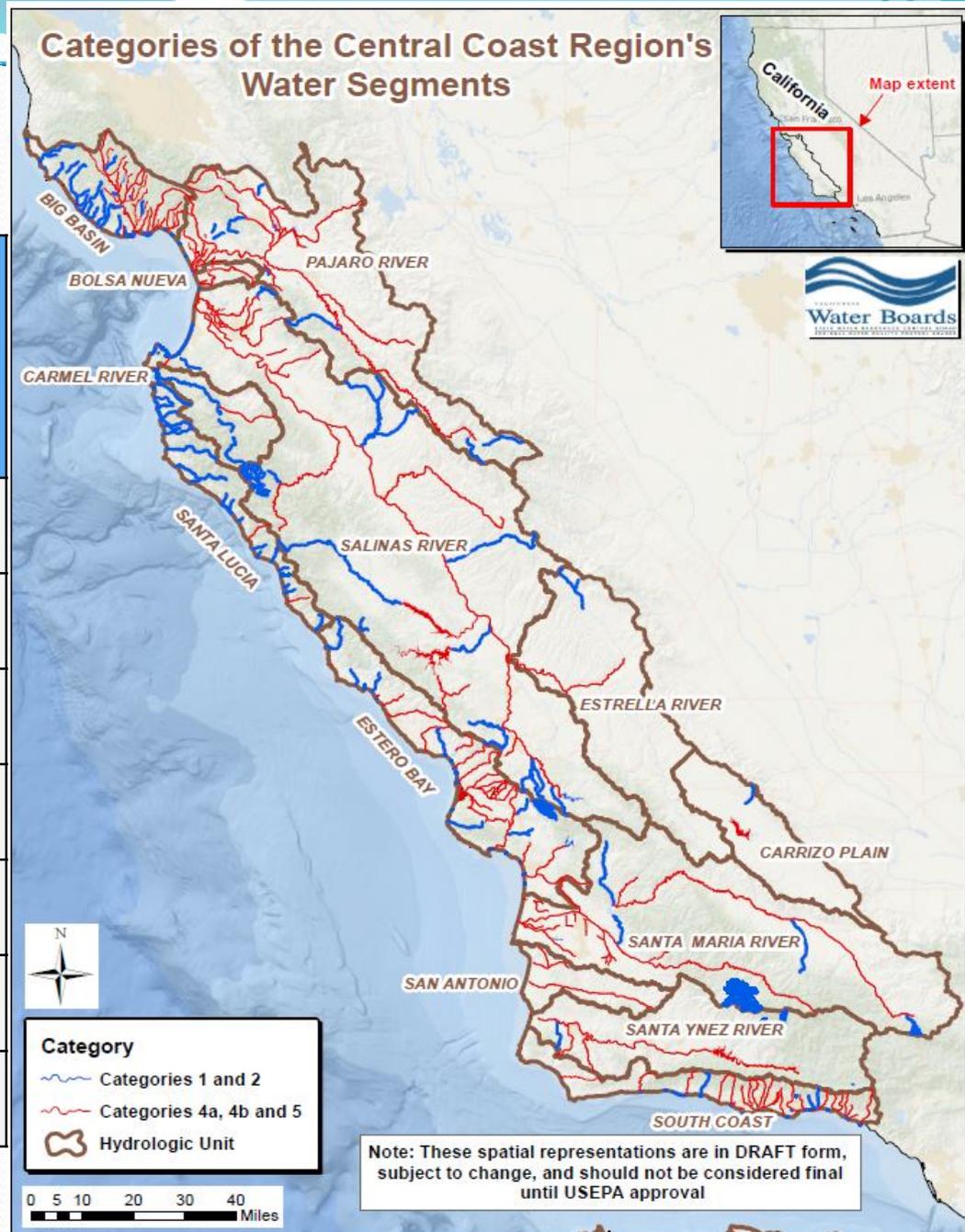
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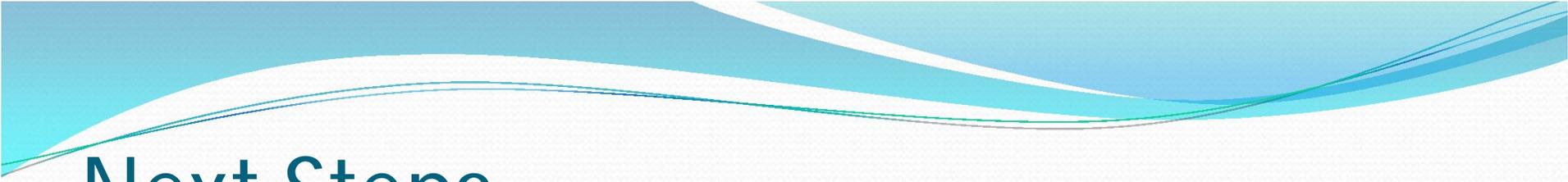
# Assessment Results

## Integrated Report Categories

Category	Number of Water Segments
<b>1</b>	<b>76</b>
<b>2</b>	<b>92</b>
<b>3</b>	<b>0</b>
<b>4a</b>	<b>21</b>
<b>4b</b>	<b>0</b>
<b>4c</b>	<b>0</b>
<b>5</b>	<b>199</b>

Category	Number of Water Segments
1	76
2	92
3	0
4a	21
4b	0
4c	0
5	199





# Next Steps

- Public Comment Period Ends September 23, 2016
- Water Board Staff Respond to Comments
- Public Hearing and Consideration for Adoption at Central Coast Water Board Hearing on December 8-9, 2016
- Public Hearing and Consideration for Adoption at State Board Hearing, June 2017
- Submit to EPA, Date TBD

# Questions & Comments

**Contact Mary S. Hamilton for more  
information**

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

**Email List Subscription**

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