Public Workshop

Draft Clean Water Act Sections 305(b) and 303(d) Integrated Report for the San Diego Region

July 2016

AGENDA

- 9:30-9:35 Logistics
- 9:35-9:40 Project Introduction (David Gibson)
- 9:40-10:20 Project Presentation (Xueyuan Yu and Chad Loflen)
- 10:20-11:30 Public Input

PURPOSE OF THE WORKSHOP

- Introduce for public review and comment:

  Procedures and results of assessment conducted for the preparation of *2014 Draft Clean Water Act Section 305(b)/303(d) Integrated Report (Integrated Report) for the San Diego Region*

Draft Integrated Report (including Appendices) available on line at: http://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/index.shtml

OUTLINE

- Background
- Integrated Report Process
- Assessment Results
- Region Specific Analysis
- Path Forward

LEGAL REQUIREMENTS

- Goal of Clean Water Act (CWA)
- CWA Section 305(b)
  - Requires States to biennially submit a report assessing statewide surface water quality.
- CWA Section 303(d)
  - Requires each State to submit a list of those waterbody segments that are not meeting water quality standards
  - Impaired waterbody segments on 303(d) list require Total Maximum Daily Loads (TMDLs) or TMDL alternatives

PREVIOUS INTEGRATED REPORTS (IRs)

- http://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/#impaired
- Between 1976 and 1998: IR updated every two years
- Since 2000: IR updated every four years for the San Diego Region

2014 IR CYCLE

For data submitted between **January through August 2010** (i.e. originally for the 2012 Cycle):

Proposed Reporting Cycles by Region

2012 Integrated Report	the North Coast Regional Water Quality Control Board (Region 1) ; the Lahontan Regional Water Quality Control Board (Region 6); and the Colorado River Basin Regional Water Quality Control Board (Region 7)
2014 Integrated Report	the Central Coast Regional Water Quality Control Board (Region 3); the Central Valley Regional Water Quality Control Board (Region 5); and **the San Diego Regional Water Quality Control Board (Region 9)**
2016 Integrated Report	the San Francisco Bay Regional Water Quality Control Board (Region 2) ; the Los Angeles Regional Water Quality Control Board (Region 4); and the Santa Ana Regional Water Quality Control Board (Region 8)

INTEGRATED REPORT PROCESS

THE LISTING POLICY

- The Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List (2004, State Board)

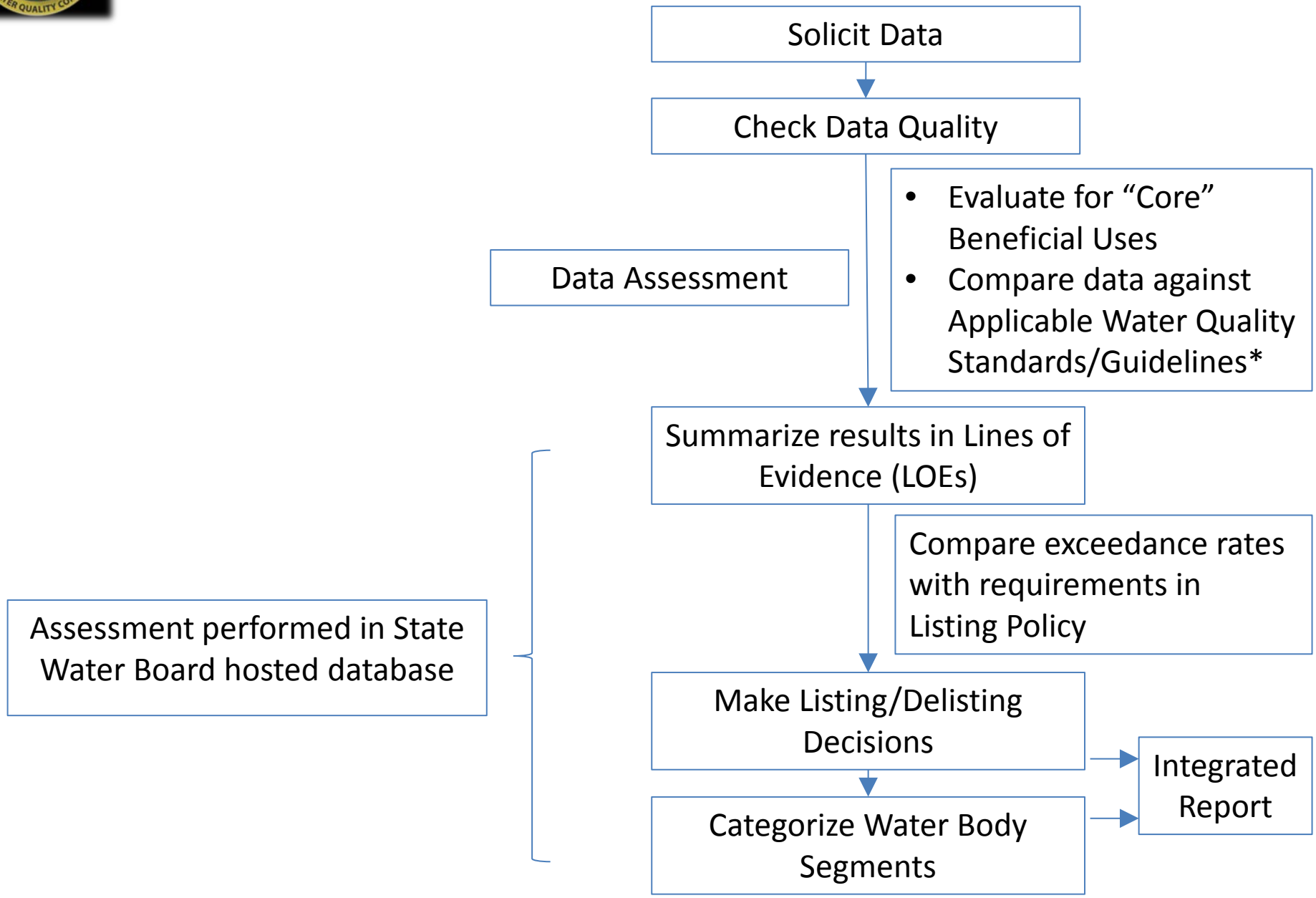
  http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2015/020315_8_amendment_clean_version.pdf

- Provides guidelines for water quality assessment process and establishes standard approach for developing California's 303(d) list

DATA SOLICITATION

- Data included in assessment: received at the State Water Board between **January 14, 2010 through August 30, 2010**
- Data sources
- Data collected after August 30, 2010 AND submitted to California Environmental Data Exchange Center (CEDEN):
  - The majority will be assessed in the next cycle of 303(d) update for the San Diego Region of 2020
  - Priority waterbody(ies) and/or pollutants identified by the San Diego Water Board may be assessed off-cycle before 2020

DATA ASSESSMENT OVERVIEW



Water Quality Standards/Guidelines*

- Regulatory Limits as contained in
  - Water Quality Control Plan for the San Diego Basin (Basin Plan)
  - California Ocean Plan
  - California Toxics Rule (40 CFR 131.27)
  - California Code of Regulations (e.g. Title 22, Maximum Contaminant Levels)
- Other evaluation guidelines (e.g., OEHHA fish consumption advisories and CDPH health advisories, see complete list in Appendix K)

CATEGORIZE WATERBODY SEGMENTS

- Five Categories in 305(b) :
  - Category 1
  - Category 2
  - Category 3
  - Category 4 (TMDL is NOT needed)
  - Category 5 (TMDL is needed)

TMDL or alternative NOT needed (for specific beneficial use)

303(d)

ASSESSMENT RESULTS

STATISTICS OF 2014 CYCLE

- Data evaluated in 2014 increased by 190% compared with in 2010

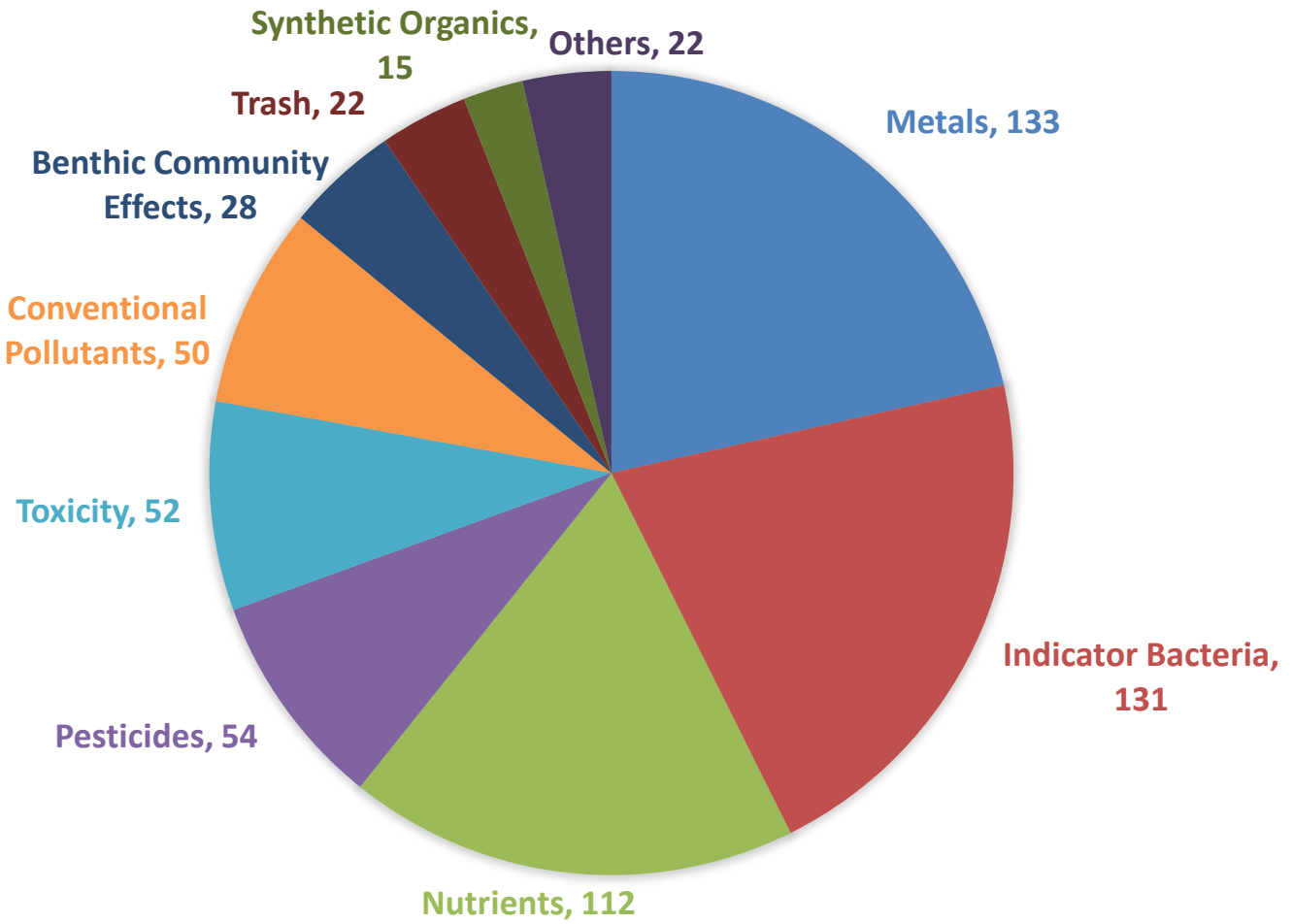
Statistics	2014	2010	2006
Total Number of Waterbody Segments	401	274	101
Total Number of New LOEs	4996	2635	1424
Total Number of Decisions	3548	1623	935

- 236 new listing decisions
- 6 new delisting decisions
- Results summarized in Appendices A and I

SUMMARY OF CATEGORIES/WATERBODIES

CATEGORY	DESCRIPTION	WATERBODY SEGMENTS
1	All assessed beneficial uses supported and no beneficial uses known to be impaired.	25
2	At least one, but not necessarily all, core beneficial use is supported.	111
3	There is insufficient data and/or information to make a beneficial use support determination but information and/or data indicates beneficial uses may be potentially threatened.	70
4	At least one beneficial use is not supported but a TMDL is not needed.	68
4a	A TMDL has been developed and approved by USEPA for a waterbody-pollutant combination and the approved implementation plan is expected to result in full attainment of the water quality standard within a specified time frame.	19
4b	Another regulatory program is reasonably expected to result in attainment of the water quality standard within a reasonable, specified time frame.	19
4c	The non-attainment of any applicable water quality standard for the waterbody segment is the result of pollution and not caused by a pollutant.	30
5	At least one beneficial use is not supported and a TMDL is needed.	182

POLLUTANT LISTINGS



TMDL SCHEDULES

- Thirty eight U.S. EPA adopted TMDLs or TMDL alternatives
- Five water bodies with TMDLs/TMDL alternatives in progress

REGION SPECIFIC ANALYSIS

Integrated Report: Stream Bioassessment Data

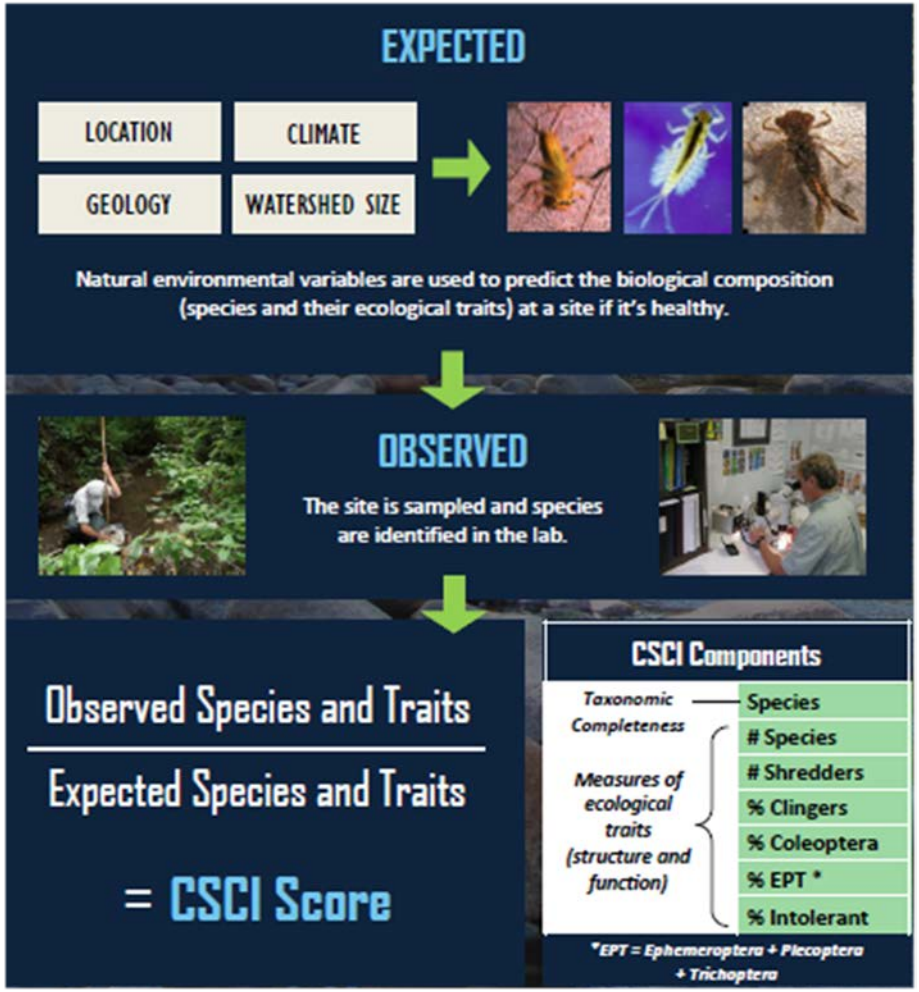
An evaluation of the condition of a waterbody based on the organisms living within it

Why Bioassessment?

- Chemical, Physical, and Biological Integrity
- Integrated Report: Chemical Focus
- Beneficial Uses Relate to Biological Integrity

California Stream Condition Index (CSCI)

The CSCI is a biological scoring tool that helps aquatic resource managers translate data about benthic macroinvertebrates found living in a stream into an overall measure of stream health.

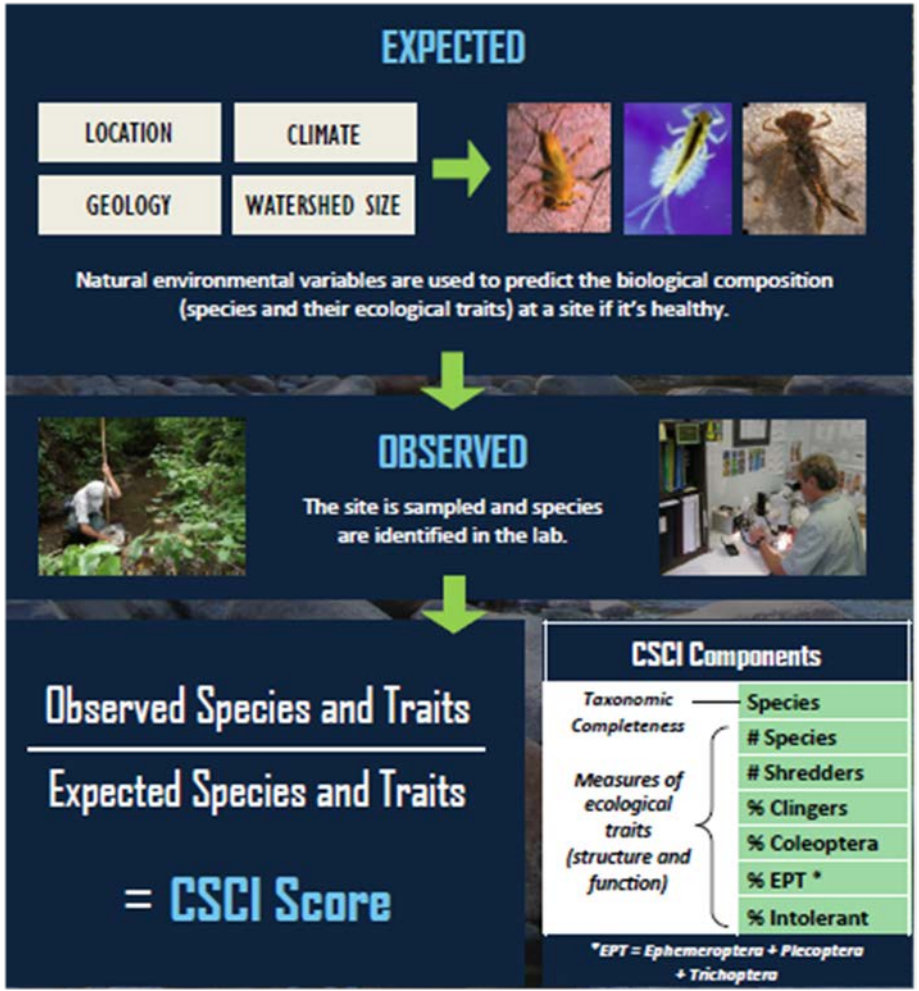


California Stream Condition Index CSCI

CSCI = 1.00 Expected Condition at Similar Reference Sites

CSCI < 0.79 Likely Altered

CSCI < 0.63 Very Likely Altered



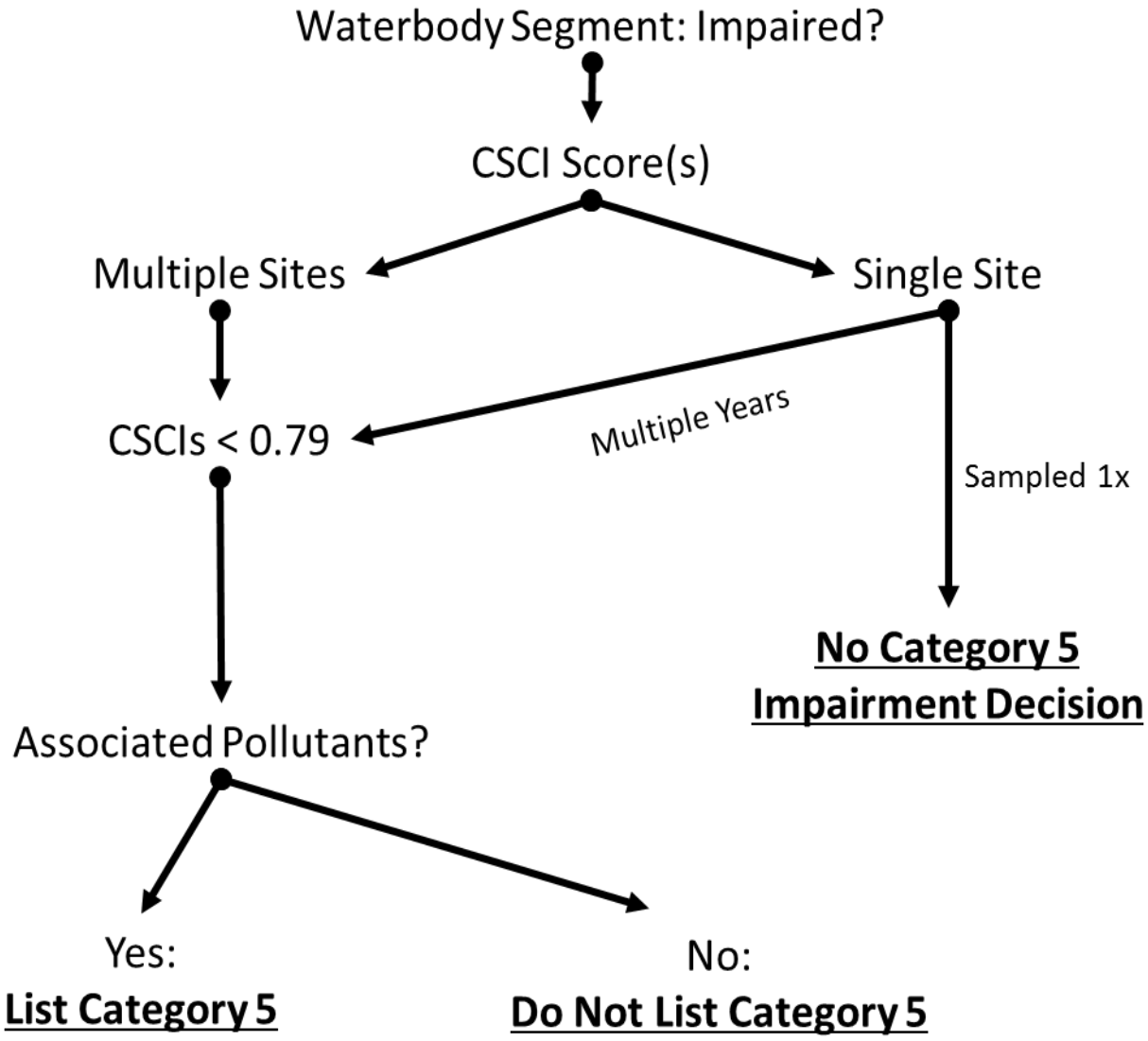
CSCI and Degradation of Biology

Listing Policy:

1) Degradation per CSCI Scores
&
2) Associated Pollutants (Impairment)

- **Approach used by Los Angeles Regional Board in 2010**
- **All three regions in current listing cycle**

CSCI and Degradation of Biology



Example: Loma Alta Creek

CSCI Score(s): Yes

Multiple Sites — 3 Sites, 8 sampling events

CSCIs < 0.79

0.54, 0.57
0.50, 0.68
0.64, 0.66
0.58, 0.63

Associated Pollutants?

Toxicity
Pesticides
Selenium
Nutrients (Slough)

Yes:

List Category 5

Example: Loma Alta Creek

CSCI Score(s): Yes

Yes:

List Category 5

Example: Loma Alta Creek

CSCI Score(s): Yes

↓

Yes:

List Category 5

↓

Hydromodification/Habitat Alteration?

↓

Yes:

Also List as Category 4c

Category 4c: Impaired by "Pollution"

Examples of pollution (USEPA 2015):

- **Habitat Alteration**
- **Hydrologic Alteration**

What does it mean?

- **Water Body is Impaired**
- **A TMDL is not needed**
- **States use other tools for restoration**
- **Mangers use to set priorities**

CSCI and Degradation of Biology

- 28 Waterbody Segments Listed Impaired under Category 5
- All 28 Co-listed under Category 4c
- Nutrients, Pesticides, Toxicity

Bioassessment and Category 1

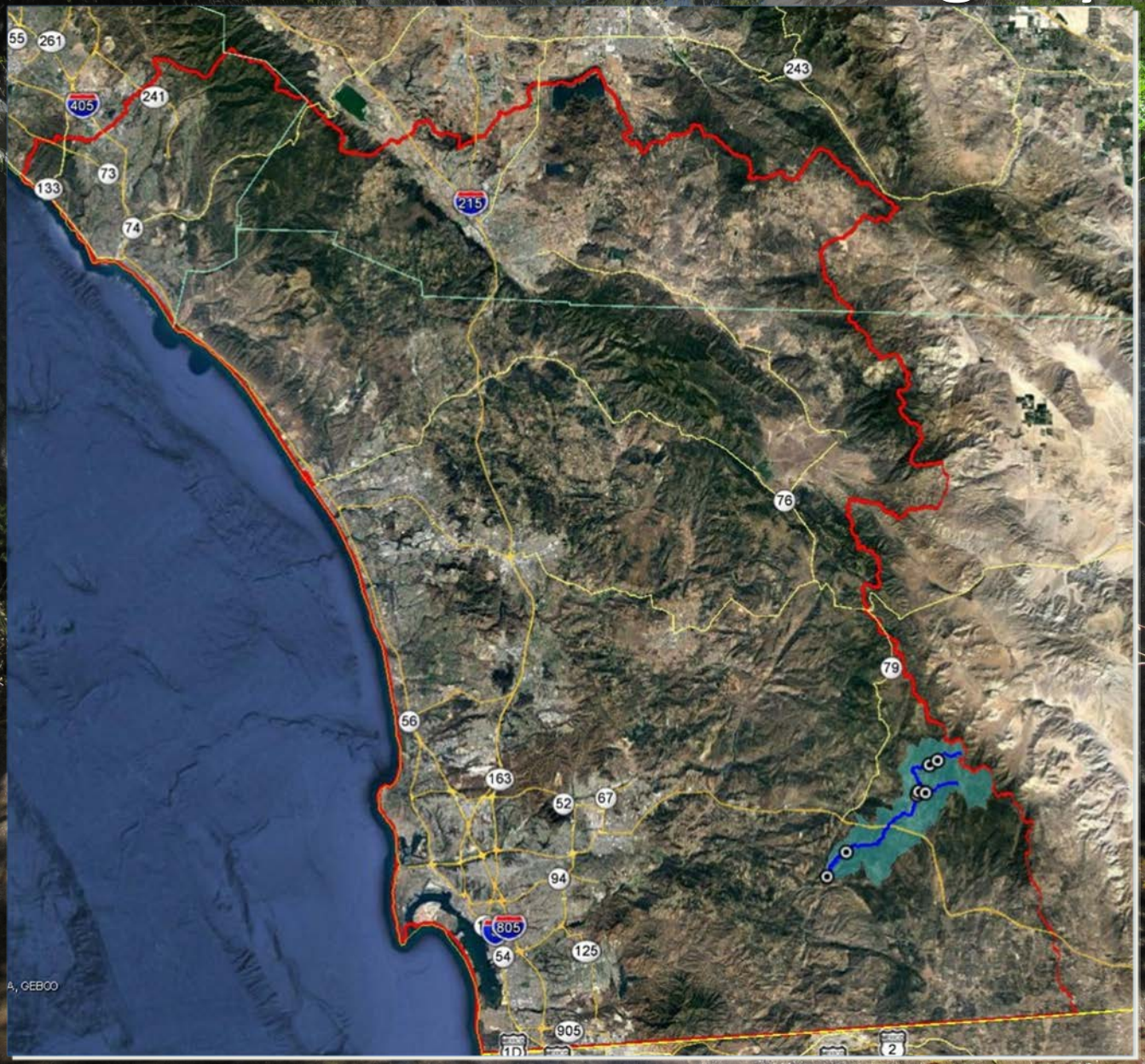
All assessed beneficial uses supported and no beneficial uses known to be impaired.

Bioassessment and Category 1

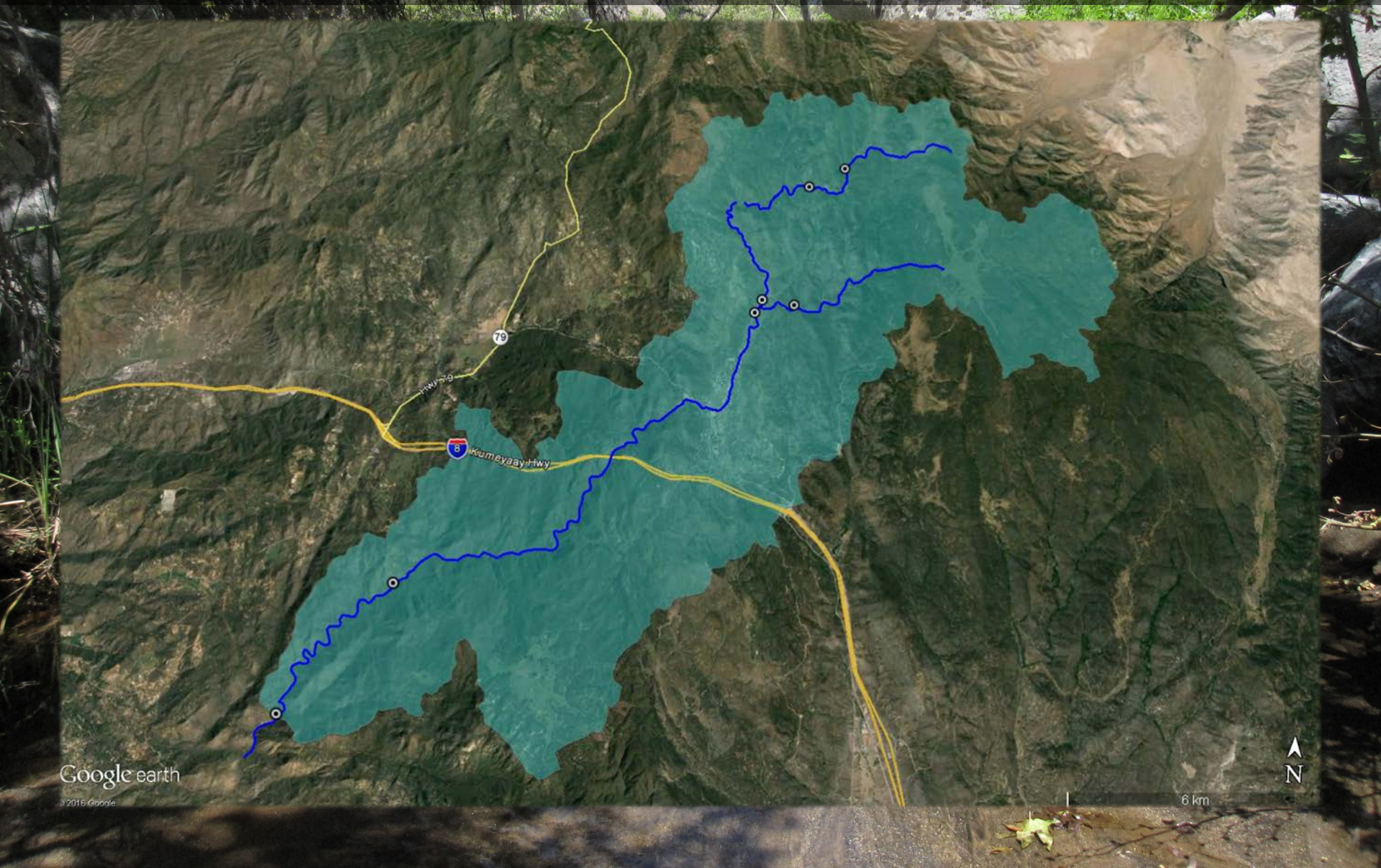
Stream Bioassessment Scores Do Not Indicate Degradation

- CSCI Scores ≥ 0.92
- Algal Index of Biotic Integrity Scores
- California Rapid Assessment Method Scores
- Reference Screens
- 25 Waterbody Segments (there's more though)

Bioassessment and Category 1



Bioassessment and Category 1



PATH FORWARD

- Written Comment Period – July 12, 2016 to August 12, 2016
- Public Hearing and Consideration for Adoption at Board Meeting – October 12, 2016
- Submit to the State Water Board for approval at a Public Hearing – 2017
- State Water Board submit to U.S. EPA for approval

For More Information, Contact

- Xueyuan Yu, (619)521-5893
  heyu@waterboards.ca.gov
- Chad Loflen, (619)521-3370
  Cloflen@waterboards.ca.gov