



Public Hearing

Tentative Resolution No. R9-2016-0196

*Approval of the 2014 Clean Water Act Section
305(b)/303(d) Integrated Report for the San
Diego Region*

October 12, 2016



PURPOSE OF THE HEARING

- Hear staff presentation, public testimony, and consider for adoption:

Tentative Resolution No. R9-2016-0196 Approval of the 2014 Clean Water Act Section 305(b)/303(d) Integrated Report (Integrated Report) for the San Diego Region



OUTLINE

- Background
 - Legal requirements (why)
 - Integrated Report Process (what and how)
 - Assessment Results
- Integrated Report – merits and limitations
- Region Specific Analysis
- Path Forward
- Conclusion



Why did we do it?

- Clean Water Act (CWA) Requirements
 - Section 305(b): State biennially submits a report assessing statewide surface water quality.
 - Section 303(d): State biennially submits
 - a list of impaired water body segments;
 - TMDL scheduling for impaired waterbodies



What have we done for the 2014 Integrated Report?

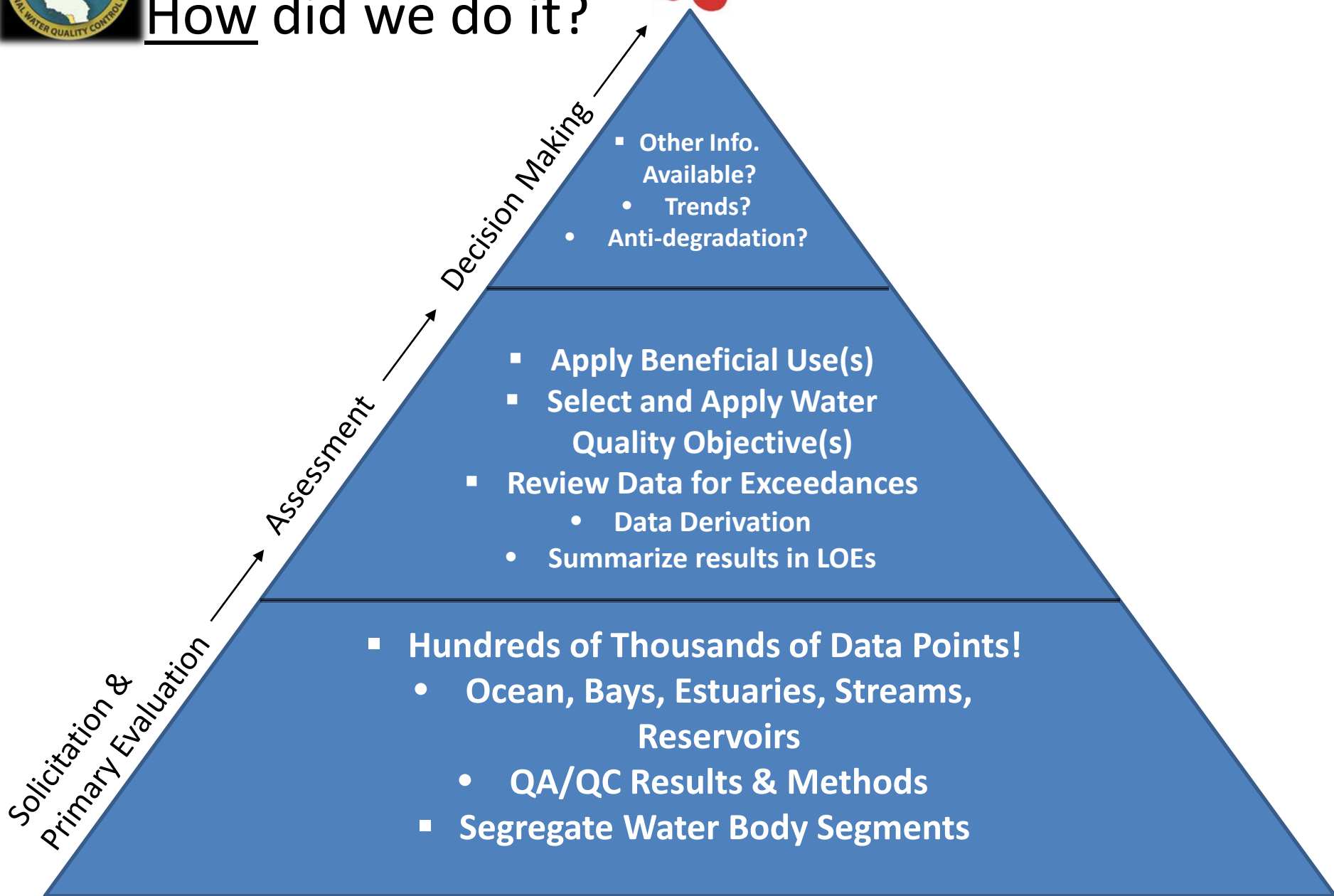
- Grouped with Central Coast Region & Central Valley Region
- 2012 – July 2016 – Assessed data to prepare draft Integrated Report (discuss later);
- July 12, 2016 – Released draft Integrated Report and started public comment period;
- July 19, 2016 – Conducted public workshop;
- August 12, 2016 – Concluded public comment period;
- September 28, 2016 – Released revised draft Integrated Report;
- October 12, 2016 – Conduct public hearing



How did we do it?



Water Body Categories
Decision(s)





2014 ASSESSMENT RESULTS

- 404 waterbody segments evaluated (274 in 2010)
- 4,996 LOEs generated and reviewed (2,635 in 2010, increased by 190%)
- 237 new listing decisions (errata)
- 9 new delisting decisions



Errata since September 28, 2016

- Decisions change to “Do not list”:
 - Arroyo Trabuco Creek/Lead
 - San Juan Creek/Malathion
 - Associated changes reflected in Integrated Report (p.27; including Appendix A, p.2 and p.26), and RTC (p.40 and p.50), as appropriate

SUMMARY OF CATEGORIES/WATERBODIES

CATEGORY	DESCRIPTION	WATERBODY SEGMENTS	
1	All <u>assessed</u> beneficial uses supported	116	
2	At least one core beneficial use supported.	111*	305(b)
3	Insufficient information to determine	70*	
4	(At least one) beneficial use not supported but TMDL not needed.		
4a	TMDL (already) developed	34	
4b	Other regulatory program (than TMDL) available	16	303(d)
4c	Non-attainment due to pollution (e.g., hydromodification)	29	
5	(At least one) beneficial use not supported and TMDL needed.	166	

* Specific number not available due to database limitations



MERITS AND LIMITATIONS



LIMITATIONS

- Old data and incomplete data
- Onerous and time-intensive database(s)
- Different approaches by State Board
- Updates of water quality standards



MERITS

- Identified waterbodies of high water quality – to protect beneficial uses proactively
- In assessment of biological integrity:
 - Peer reviewed evaluation method (i.e., CSCI) reflects scientific development
 - Identified physical impairment, e.g., hydromodification
- Aimed to identify and categorize waterbodies by their beneficial use support conditions
- Improved the Integrated Report through public input

Leadership

Stewardship

Communication

Transparency



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?

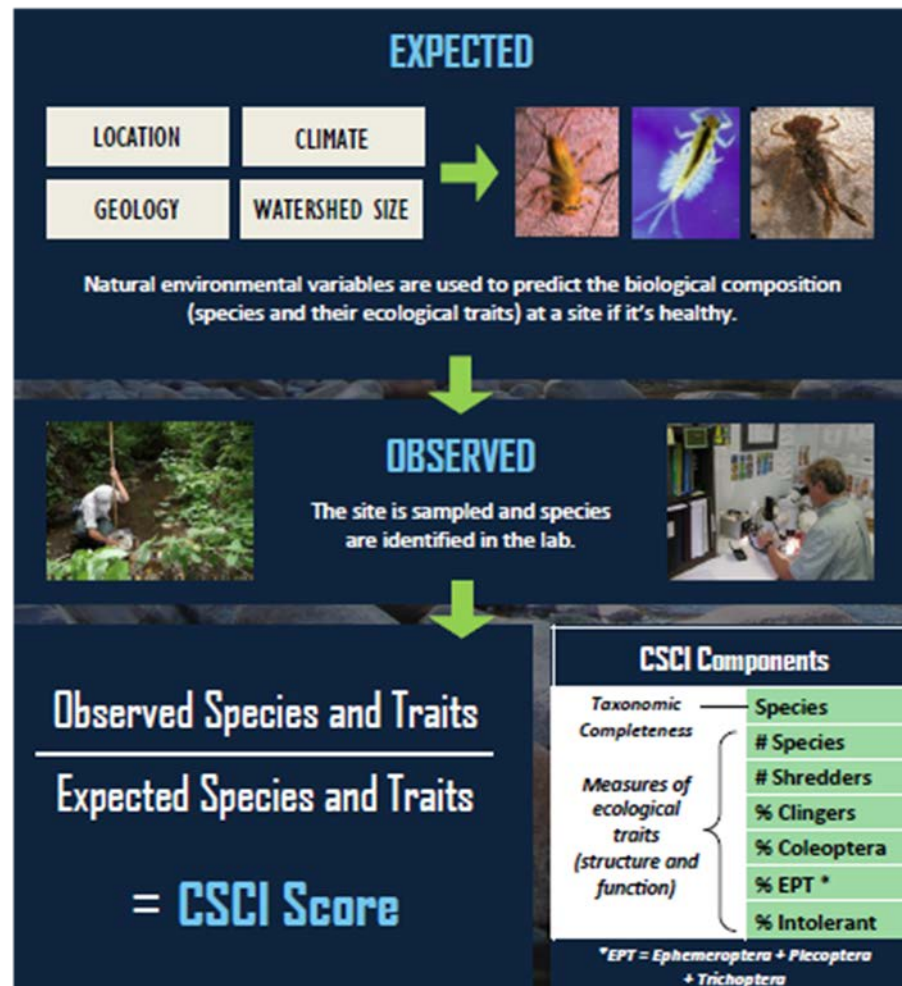
- Chemical, Physical, and Biological Integrity
 - Integrated Report: Chemical Focus
- Beneficial Uses Relate to Biological Integrity





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.



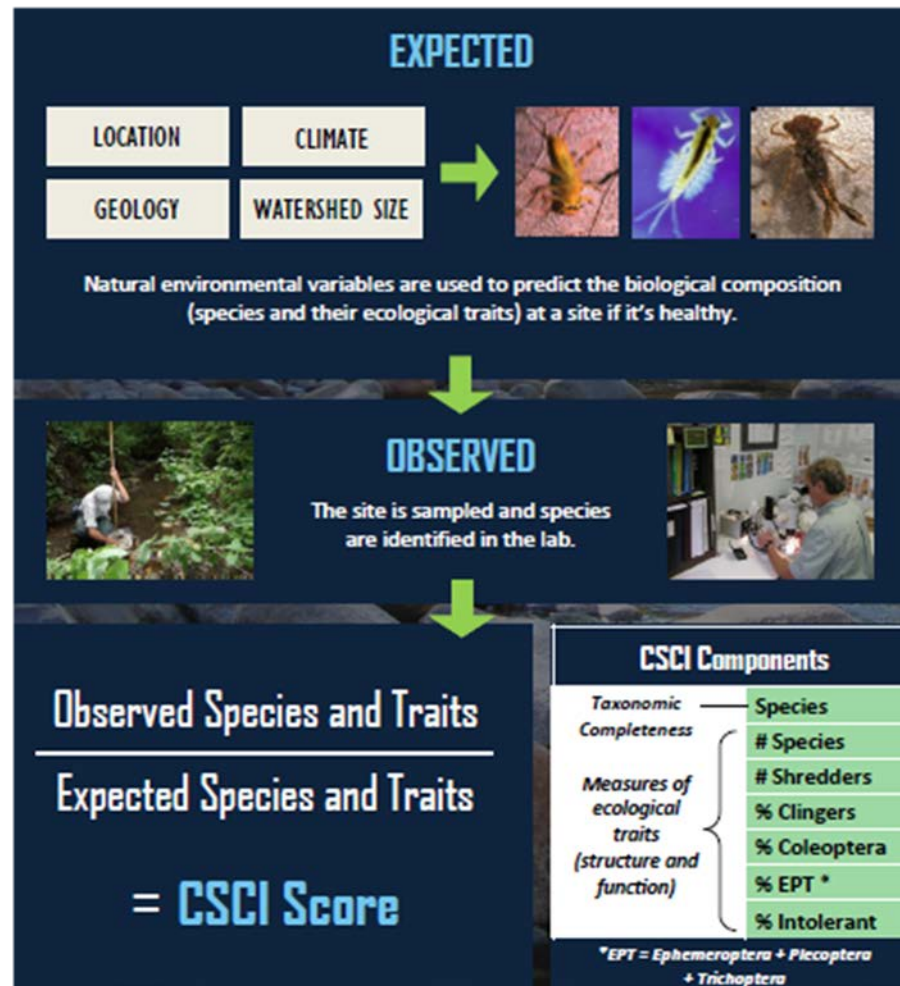


California Stream Condition Index CSCI

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

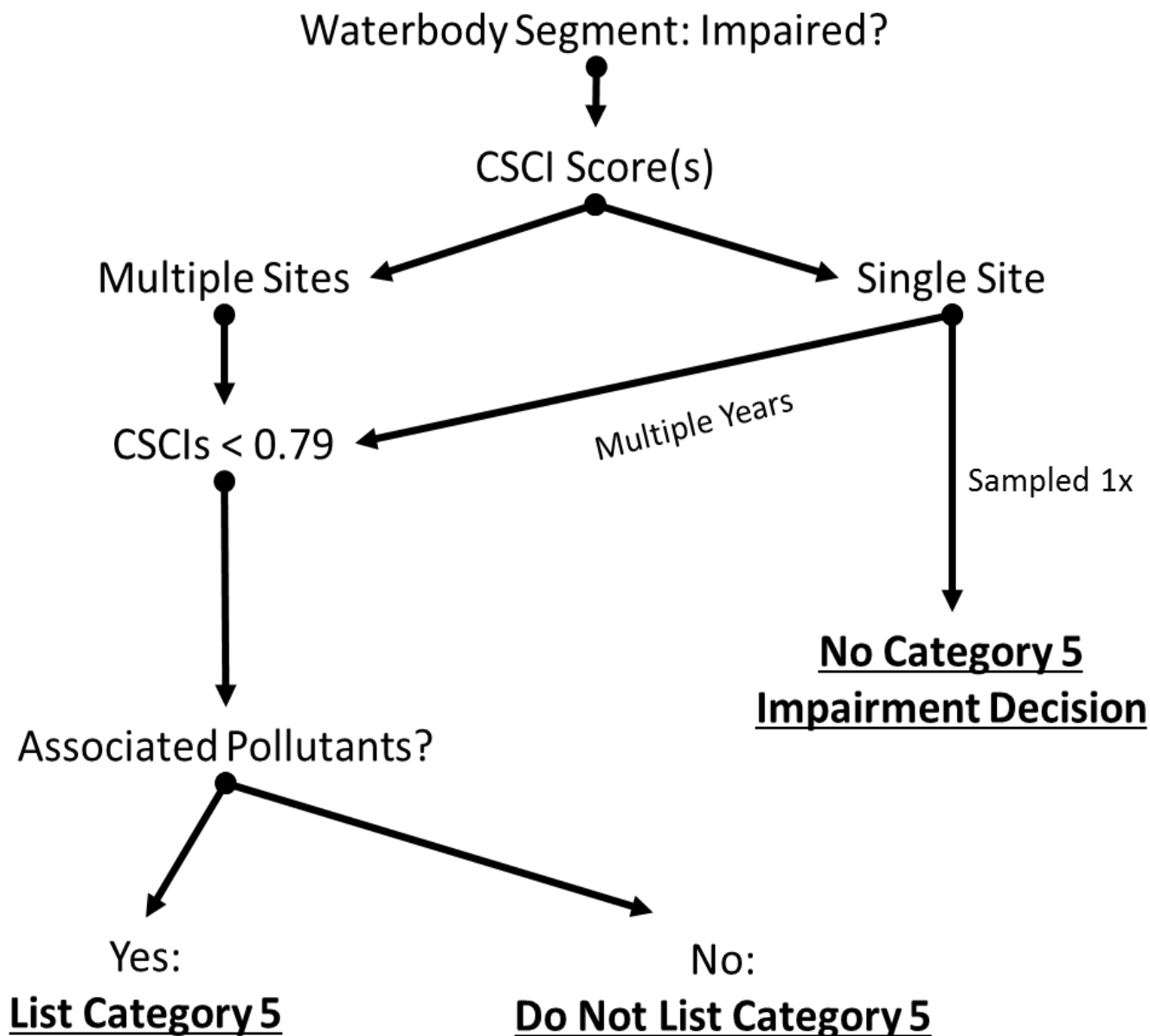
Listing Policy:

- 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**

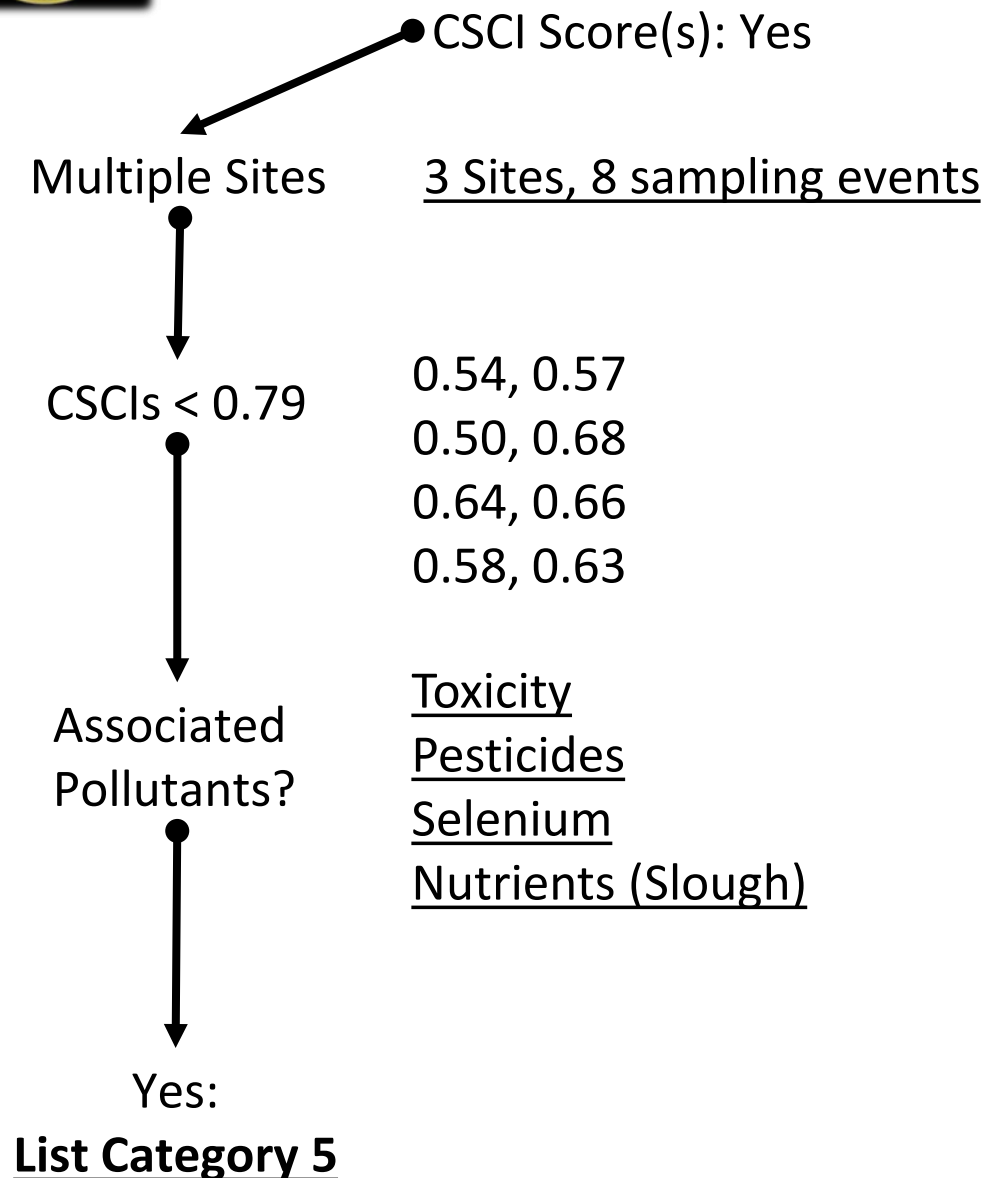


CSCI and Degradation of Biology





Example: Loma Alta Creek





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
 - Managers 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.



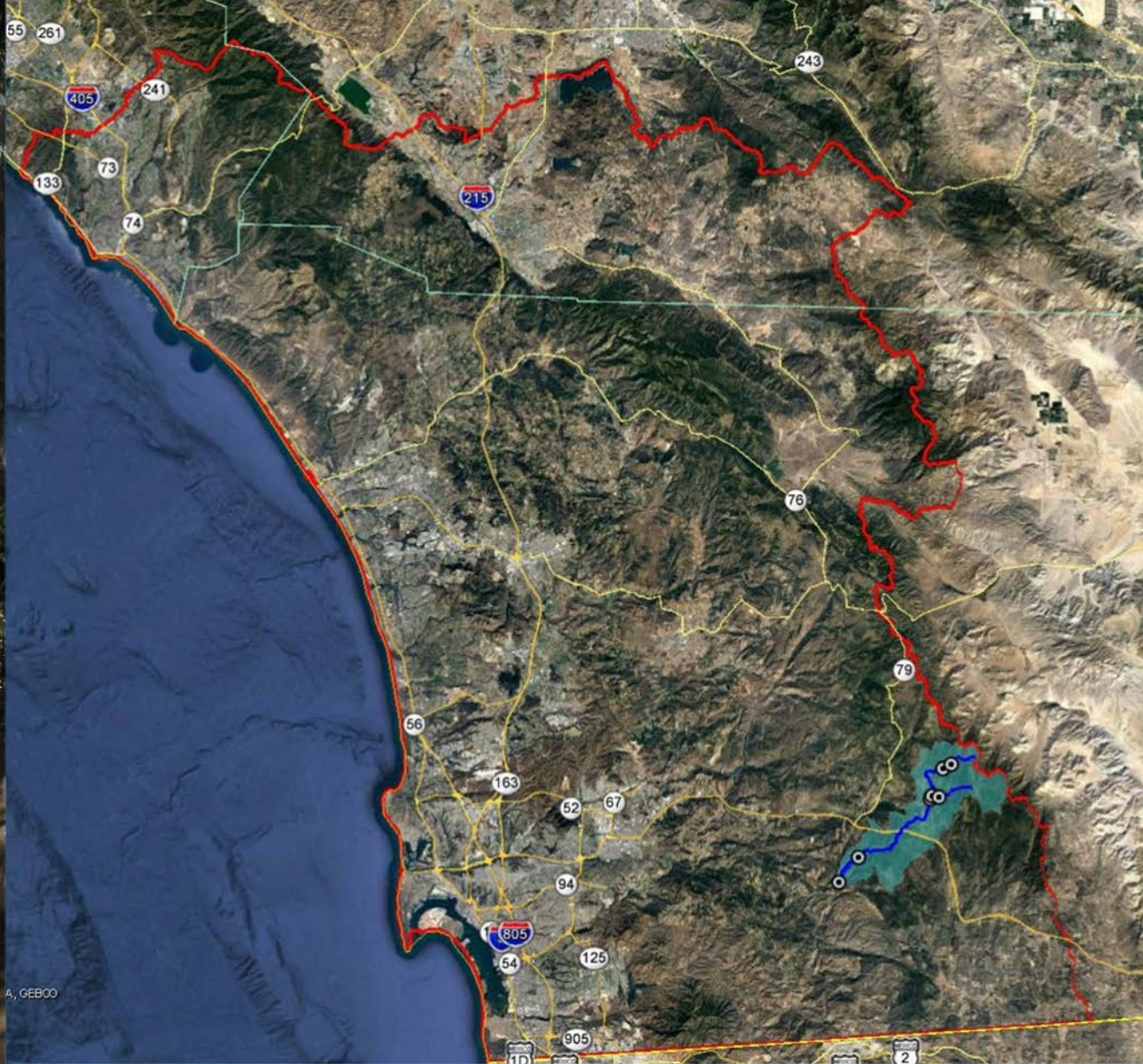
Bioassessment and Category 1

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)

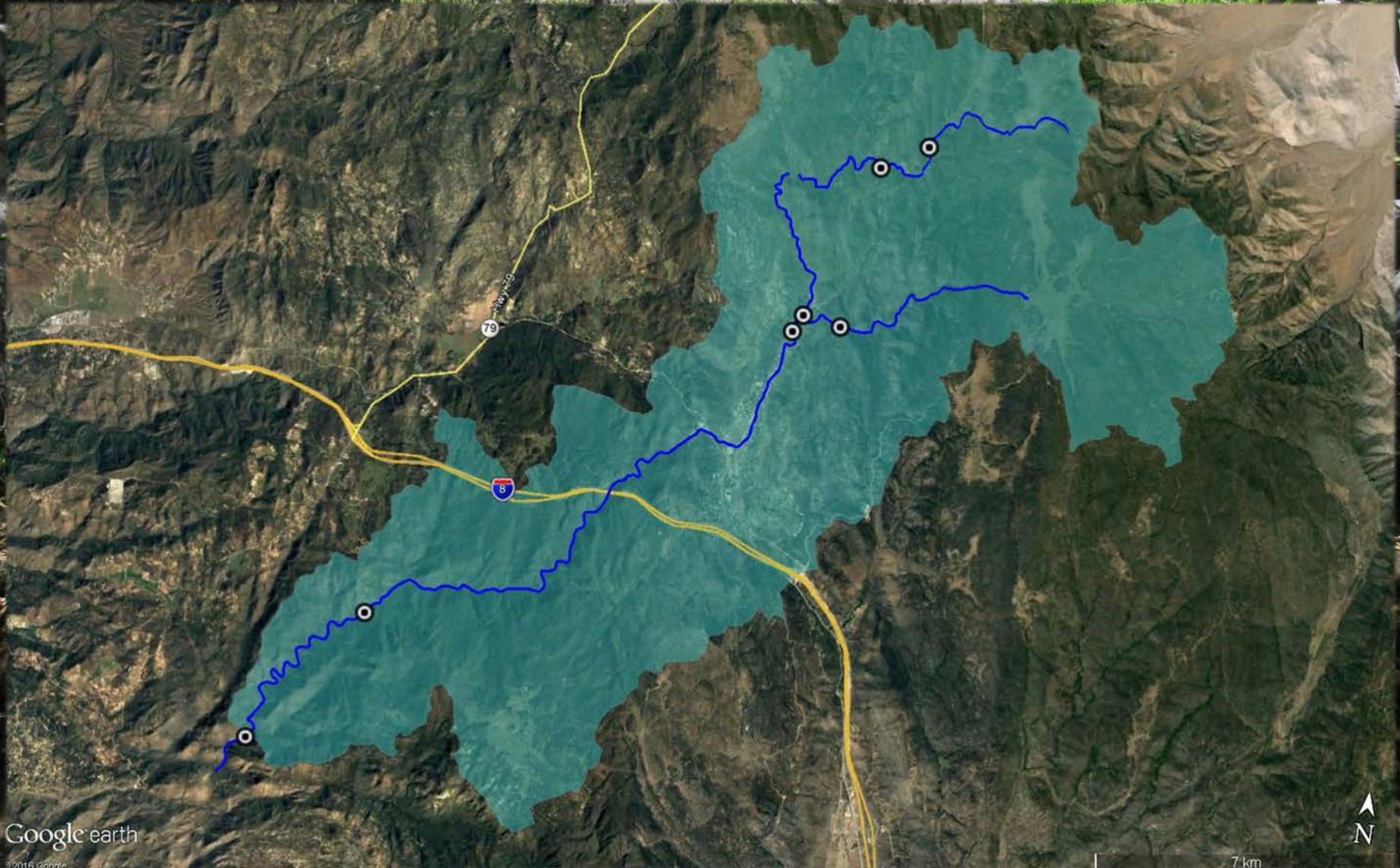


Bioassessment and Category 1





Bioassessment and Category 1





PATH FORWARD



2014 Integrated Report:

- Submit to the State Water Board for approval at a Public Hearing – 2017
- State Water Board submit to U.S. EPA for approval



Prepare for the Future

- For next (formally) scheduled cycle of 2020
 - Very likely enormous amount of data (September 2010 to 2019) to be assessed!
 - Urgently need to improve process efficiency to obtain more meaningful outcomes!
- Potential off-cycle updates
 - Focus on selected waterbody(ies)/pollutant(s) identified with appropriate prioritization strategies and public input.



Conclusion

- 2014 Integrated Report not perfect, but contains good elements and deserves adoption
- Staff recommend:
Adoption of Tentative Resolution R9-2016-0196,
Approval of the 2014 Clean Water Act Section 305(b)/303(d) Integrated Report for the San Diego Region, with errata.