

Integrated Report 101

TATYANA ISUPOV
SURFACE WATER QUALITY ASSESSMENT

Integrated Report- Why?

The Integrated Report fulfills Clean Water Act (CWA) requirements to report on:

- the water quality status of all waters in the state
- document the availability of data and information for each water
- identify certain trends in water quality conditions
- provide information to managers in setting priorities for future actions to protect and restore aquatic resources



Integrated Report 101

The Integrated Report (IR) addresses CWA requirements for the Section 303(d) List and 305(b) Report.

303(d) List – Impaired Waters

- Waterbody segments not meeting water quality standards.
- A "listing" refers to the process of determining if beneficial uses are protected and water quality standards are attained for a waterbody.



305 (b) Report- Condition Categories

- Each waterbody segment assigned 1 of 5 "Condition Categories"
- Categories 4 & 5 denote an impaired listing

Condition Categories

Categories that show beneficial uses (BUs) are being supported

Category 1: At least one core BU is supported and none are known to be impaired

Category 2: Insufficient information to be assessed or it has other uses that are not assessed

Category 3: There is insufficient data to make a BU determination, but data indicates BUs may be potentially threatened

Condition Categories

Categories that show beneficial uses are NOT supported

Category 4: At least one BU is not supported but a TMDL is not needed

- 4A: A TMDL has been approved for any waterbody-pollutant combination, and the implementation plan is expected to result in full attainment of the water quality standard within a specified time frame.
- **4B**: Another regulatory program is reasonably expected to result in attainment of the water quality standard within a reasonable, specified time frame.
- **4C**: The non-attainment of any applicable water quality standard for the waterbody segment is the result of pollution and is not caused by a pollutant.

Category 5: A water segment where standards are not met and a TMDL is required, but not yet completed

Listing Policy: Outline for IR

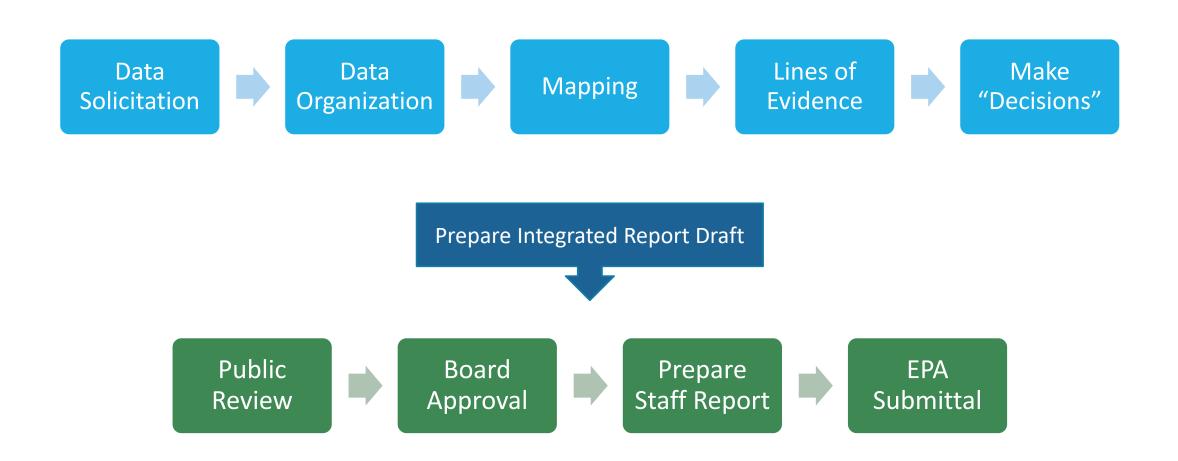
"Water Quality Control Policy for Developing California's CWA Section 303(d) List"

Policy purpose: promotes consistent evaluation of data to produce LOEs and their decisions.

- Adopted in 2004 and amended in 2015
- Provided clear guidelines and requirements
- All data must be submitted through CEDEN and created "Listing Cycles"



IR Process Overview



Data Solicitation

A formal "Notice of Public Solicitation" initiates data solicitation for the IR Cycle.

There are 3 "on-cycle" regions, but all regions are encouraged to submit data as soon as it's ready.

- Must be submitted by the deadline.
- Preparing to start the 2020 Data Solicitation in December 2018.

All readily available data is to be submitted through CEDEN (California Environmental Data Exchange Network).

- Allows for standardized data format.
- We will launch a new platform to upload non-CEDEN compatible data and QAPPs





Data Organization

The data and information used in a Line of Evidence (LOE) when making a listing or delisting recommendation for the 303(d) list of limited water quality.

Data is checked for quality assurance by Water Quality Assessment staff.

- Data is in a consistent and assessable format
- Includes an approved Quality Assurance Project Plan or equivalent document
- Geospatial data includes metadata (i.e. datum)

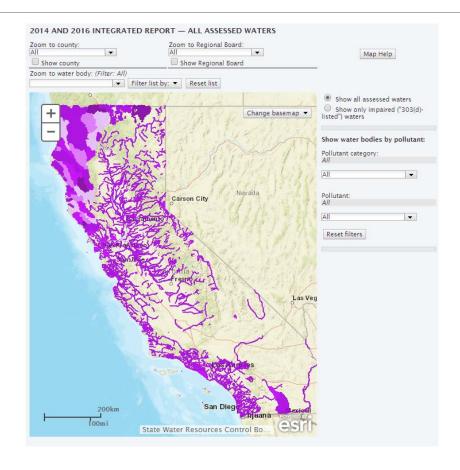
Data and QAPPs are loaded into the CalWQA database.

- California Water Quality Assessment Database
- Database used to store references, write LOEs, and make listing decisions.

Mapping Stations and Waterbodies

Ensures that new data stations are associated with a physical location and are spatially independent

Requires close collaboration between Regional and State staff; to ascertain waterbody segments are represented correctly.



Select Evaluation Guidelines

A guideline used to interpret the data used in the LOE; such as a sediment quality guideline, health advisory, etc.

Selection of an evaluation guideline is made using:

- Waterbody, pollutants and beneficial uses
- Water quality objectives/criteria
- Evaluation guideline that represents water quality objective attainment or beneficial use protection

Evaluation guidelines based on hierarchical approach:

- Most to least specific
- Most to least defensible
- Most to least protective



Create Lines of Evidence

The process of summarizing data to add or remove a waterbody to the 303(d) list.

Each LOE is a unique combination of:

WBID + pollutant + Beneficial Use + Matrix + Fraction + Parent Project Name

LOE includes number of samples, number of exceedances, summarizes data after going through steps of quality control, and ensures correct assessment.

Making Decisions

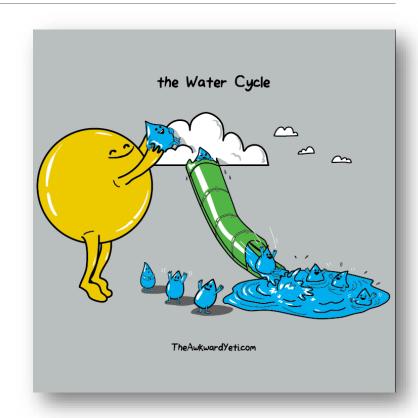
- The process of using LOEs to make a decision on the state of the waterbody
- Consider relationships between LOEs and the strength with which they support a listing action.
- Produce legally and scientifically defensible factsheets, consisting of lines of evidence and decision recommendations.

Updates

Currently working with on-cycle Regional Boards (1, 6, & 7) to develop Decisions.

 We expect to complete the 2018 Integrated Report in Fall 2020.

 Plan to solicit data for the 2020 Integrated Report in December. Regions 3, 5, & 9 will be on cycle.



Questions?

Tatyana Isupov, Environmental Scientist

<u>Tatyana.lsupov@waterboards.ca.gov</u>

Lori Webber, Senior Environmental Scientist Lori.Webber@waterboards.ca.gov

