

ITEM 8 LATE ADDITION

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**MEETING OF JULY 10, 2019
BISHOP**

ITEM 8

**SURFACE WATER AMBIENT MONITORING PROGRAM (SWAMP) CORE
PROGRAM REVIEW**

*****Please remove existing page 8-57 and replace with the following pages

ENCLOSURE

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The Surface Water Ambient Monitoring Program (SWAMP)
Water Board Staff Presentation

ENCLOSURE 2

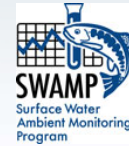
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Surface Water Ambient Monitoring Program (SWAMP) Core Program Review

Lahontan Water Board Meeting
Bishop, CA

July 10, 2019

Kelly Huck
Environmental Scientist



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SWAMP Core Program Review

1. History of SWAMP
2. Regional SWAMP (2000-2020)
3. Regional SWAMP in Transition
4. Program Revisions

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History of SWAMP

- Created in 2000
- State Water Board SWAMP Coordinates
 - Statewide monitoring programs
 - Data management
 - Tool development
- Regions focus on monitoring priorities unique to each region



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Regional SWAMP (2000-2020)

Water Quality/Chemistry Monitoring

- Evaluating compliance with water quality objectives
- Targeted monitoring at 20-30 sites quarterly
- Primary source of data for the Integrated Report



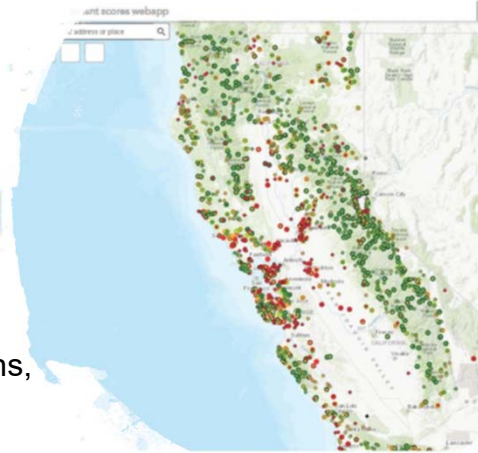
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Regional SWAMP (2000-2020)

Bioassessment Monitoring

- Tools and methodologies development
- Biological surveys, habitat monitoring, algae collections, and water quality data



Bioassessment Scores Map

Regional SWAMP (2000-2020)

Bioaccumulation Monitoring

- Mercury and PCBs
- Supports development of OEHHA fish consumption advisories
- Advisories posted at Donner Lake, Silverwood Lake, Little Rock Reservoir, and Lake Gregory

Regional SWAMP (2000-2020)

Toxicity Monitoring

- Stream Pollution Trends Monitoring Program (SPoT)
 - Evaluates trends in sediment toxicity and relates them to watershed land uses
 - Show no toxicity in the Lahontan Region, but pyrethroid pesticides have been detected in 9 of 10 sites screened



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Regional SWAMP (2000-2020)

Special Studies

- Lake Tahoe Tributary Study (2013-2014)
- Bacteria Study (2012-2014)
- Microbial Source Tracking at Bacteria-Impaired Waters of the Lahontan Region
- Susan River Toxicity Project 2016



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Regional SWAMP (2000-2020)

Data Management

- SWAMP Quality Assurance Program Plan (QAPrP)
- California Environmental Data Exchange Network (CEDEN)
- SWAMP data is used in statewide assessments and models to develop indices and assess water quality



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Regional SWAMP in Transition

New Challenges

- Freshwater Harmful Algae Blooms (FHAB)
- Instream Flows
- Contaminants of Emerging Concern (CEC)
- Climate Change
- Data Management
- Safe Drinking Water



Red Lake 2018

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Program Revisions

New Management Questions

- Are the Region's surface waters and watersheds healthy (i.e., support beneficial uses)?
- Is Climate Change impacting the Region's waterbodies? If so, how?
- What are the water quality trends?

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Program Revisions

- To determine trends (i.e. Is the water quality getting worse, better, or the same?) we will evaluate and report out on all data:
 - 20 years of data plus future SWAMP data
 - Water quality trends
 - Biological health trends

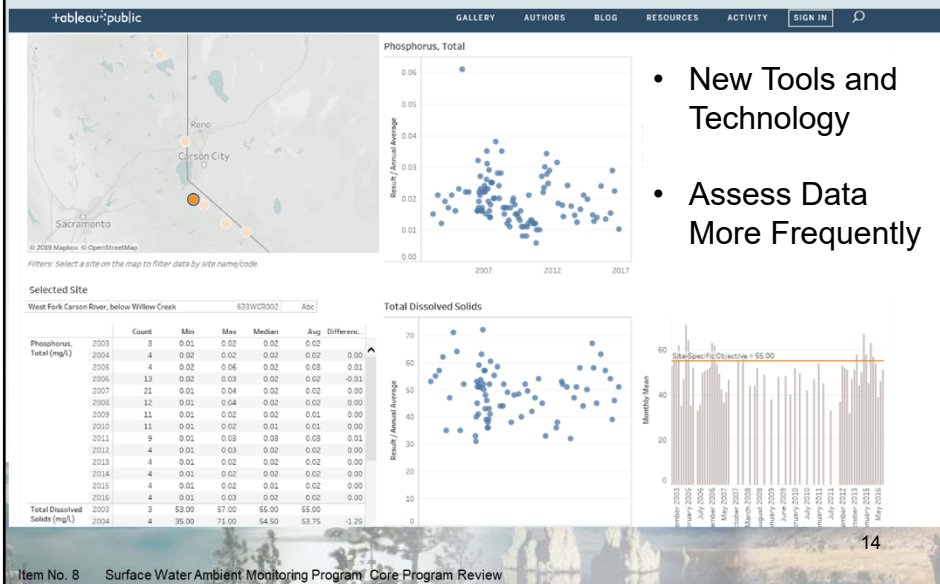
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Program Revisions

- Efficiencies – Increased Coordination with:
 - Water Board Regulatory and Enforcement Programs and TMDL and Basin Planning Programs
 - Regional partners
 - Eagle Lake Special Study
 - Tahoe Keys Property Owners Association

Program Revisions



Program Revisions

- Integrate Water Board Priorities
 - Protect Human Health and Aquatic Life
 - Support Disadvantaged Communities
 - Respond to Climate Change

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Recommendation Summary

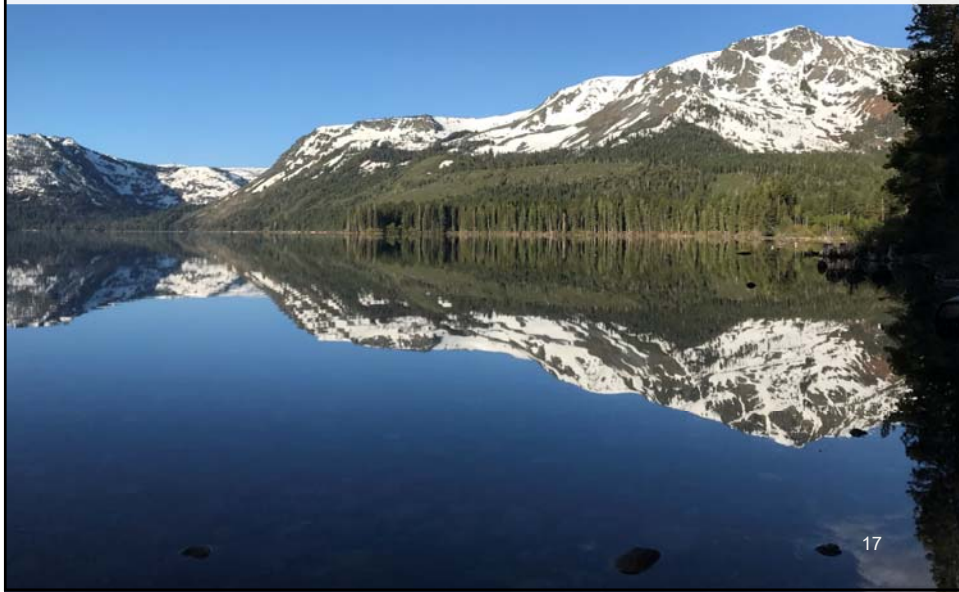
- Re-evaluate monitoring to improve the program and address new challenges
- Identify opportunities to improve program efficiency
- Maximize data access and use of analytical tools through new technology
- Integrate WB priorities in SWAMP more effectively

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Questions?



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