

SWAMP Newsletter

Sound science for informed water quality management

Winter 2016 | Issue 1

Welcome to the first issue of the SWAMP Newsletter. Every few months we plan to bring you the latest surface water ambient monitoring news from the State Water Resources Control Board. We welcome your feedback at swamp@waterboards.ca.gov.

Toxicity Testing

Are you requiring the right test organism and temperature?

The <u>Stream Pollution Trends (SPOT)</u> Monitoring Program conducted additional toxicity tests at SWAMP sites to study how the use of different test species and temperatures can influence monitoring results. SPoT found different patterns of toxicity based on the test species used, highlighting the value of using more than one organism to detect multiple pesticides. Further SPoT study findings show that the standard protocol test temperature of 23°C can dramatically underestimate pyrethroid toxicity in California watersheds. ⇒ *Learn More*

	% Lethality to Test Organism	
Water Body	H. azteca	C. dilutus
Alisal Slough	62	100
Chualar Creek	100	27
Main St. Ditch	6	8
Orcutt Creek	50	52
Oso Flaco Creek	100	28
Quail Creek	100	98
Rec Ditch III	70	96
Solomon Creek	2	100
Tembladero Slough	41	17

Toxicity Test Species SPoTlight

Midge larvae - Chironomus dilutus

Of the common toxicity test organisms, chironomids are



the most sensitive to newer classes of pesticides such as the neonicotinoid imidacloprid and fipronil. Use of both classes of pesticides is increasing in California.

Learn More

Toxic Algae

SWAMP Responds to an Emerging Problem

Cyanobacterial blooms are in the news. Warm temperatures, increased nutrients, and other factors favor these toxin-producing species. Toxic blooms are threatening swimming safety and drinking water supplies and causing wildlife and domestic animal deaths.



SWAMP is initiating a cyanobacteria monitoring support and assessment program for California that will use satellite imagery to track blooms. The <u>California CyanoHAB Network (CCHAB)</u> coordinates response efforts by agencies, organizations, and tribes, and is updating guidance on how to respond to blooms. Together, they will bring this information and more to a new portal on the California Water Quality Monitoring Council's My Water Quality website.

SWAMP Strives to Improve Water Board Monitoring Efforts

How good are the data that you rely on to make decisions? SWAMP aims to improve the usefulness of monitoring and the quality of resulting data generated by Water Board programs.

See what is in the works for your ambient monitoring program as SWAMP promotes question-driven science! \Rightarrow <u>Learn More</u>



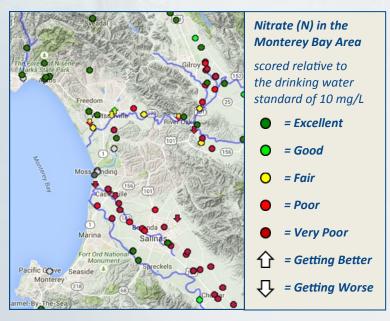
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The CCAMP Data Navigator

A tool for better decision making

The California Central Coast Region's Data Navigator turns data into information at www.ccamp.org. This data viewing tool can serve as a model for how to make online data more accessible, useful and meaningful. Sites are color scored according to selected thresholds. The Data Navigator shows data in map, graph, and table formats, and provides access to statistical analyses, trends in concentration and load, documentation on thresholds and methods, interpretive map layers and other useful information. These web tools tell "data stories" to help staff make meaningful decisions.

\$\int_{Learn More}\$



SWAMP Calendar

OIMA Brown-bag Series in Water Quality & Data Analysis

January 28 and last Thursday of each month, 12:00–12:30 p.m., CalEPA Headquarters Building in Sacramento. Attend in person or online. More information and recorded seminars here.

Quality Assurance Roundtable

Established to ensure that an appropriate level of planning for data acquisition and analysis is applied consistently throughout the State and Regional Water Boards. March 16 and June 15. More information here.

Water Board Data Fair

A forum to enhance the availability and integration of the Water Boards' key datasets. March 18. For more information, contact Jarma Bennett at jarma.bennett@waterboards.ca.gov or (916) 341-5532.

Clean Water Team Offers Free 2016 Calendar (Online or PDF)

Don't miss major water-related events and more! Get your copy here.

Statewide Survey Finds Fish-Eating Birds At Risk from Mercury in Many of California's Lakes



SWAMP has released findings from the first statewide survey of contaminants in wildlife from California waters. The findings are summarized in a fact sheet, technical report, Estimating Exposure of Piscivorous Birds and Sport Fish to Mercury in California Lakes Using Prey Fish Monitoring - A Predictive Tool for Managers, and a journal article in Environmental Science and Technology. The study:

- Evaluated mercury risk to wildlife (fish-eating birds) in a representative sample of California lakes,
- Documented correlations between concentrations of mercury in birds and fish and developed a <u>spreadsheet tool</u> that can be used to estimate risk to birds in lakes where fish data are available, and
- Established methods for monitoring birds and fish in lakes to estimate mercury risk to wildlife.

SWAMP Calendar (continued)

Water Board Code-a-thon

Focused on creating apps, visualizations, and other tools to better harness available data currently found in CEDEN, SMARTS and CIWQS databases. The event will also kick-off the first phase of the Water Boards' open data initiative. April 18-22, 10:00 am. For more information, contact Jarma Bennett at jarma.bennett@waterboards.ca.gov.



