California Water Quality Monitoring Collaboration Network Workgroup Summary for 2016/2017

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Reflection on 2016 Activities

In 2016 the <u>California Water Quality Monitoring Collaboration Network</u> (Network) collaborated with several groups to provide access to other limited training and collaboration opportunities via online videos. These videos captured presentations from two special training opportunities and from the First Annual California Water Quality Science Symposium. These efforts expanded participation in effective water quality monitoring and data utilization.

Harmful algal blooms (HABs) and algal toxins have increased in geographic range, frequency, duration, and severity in recent years. HABs are problematic because they can affect multiple beneficial uses including recreation, aquatic life, and drinking water by reducing aesthetics, lowering dissolved oxygen concentration, causing taste and odor problems, and producing potent toxins.

Training on how to monitor, assess and manage HABs is greatly needed but workshops have been very limited. Through the Network's first collaboration, seven videos <u>on Identifying and Responding to Cyanobacteria Harmful</u> <u>Algae Blooms in California</u> were produced. These videos allow those unable to attend the workshop to still benefit from what was presented and help California address this emerging water quality and public health issue. The Network collaborated with the Surface Water Ambient Monitoring Program (SWAMP), the Water Board's Training Academy, and UC Extension Services to video record a workshop by Wayne W. Carmichael, PhD and Beverley Anderson-Abbs, State Water Resources Control Board. These videos are also available on the <u>Resources and Guidance page of the HABs Portal</u>.

Effective and meaningful utilization of data both for managers and use by the public is an increasingly important topic. In response to this the Water Boards' Surface Water Ambient Monitoring Program (SWAMP) hosted the <u>1st Annual Water Quality Science Symposium</u> at CalEPA. This symposium followed the Water Boards' Data Fair in March and Data Innovation Challenge in April, with the focus being on the use of data by other programs and Departments.

The Network was able to edit and webpost 15 videos from this symposium. This work has made it easier for the public and water quality professionals to access and view presentations. These presentations were aimed to daylight surface water quality data, insights, and interests on California surface water quality topics; better connect data, information and knowledge to water quality stakeholders and decision makers; and create a networking community to enhance better communication throughout the year.

Bioassessment data relies on taxonomically correct identification of the sample. Taxonomic resolution continues to be a challenging concern for some species and opportunities for taxonomist to attend workshops with this focus tend to be fairly rare. Through collaborations the Network was able to expand attendance via webcasting a <u>Short Course in Baetid Larval Taxonomy</u>. Web participation more than doubled the courses enrollment and benefitted taxonomists in California (the one day course was held in Oregon). In addition, the video has allowed many others to learn proper identification techniques for these benthic macroinvertebrates. The video and workshop collaboration included Portland State University, the Pacific Northwest Chapter of the

Society of Freshwater Sciences, the California Chapter of the Society of Freshwater Sciences, the Southwest Association of Freshwater Invertebrate Taxonomists, and the Network.

Anticipation & Inspiration for 2017

Across the US and worldwide, it has been demonstrated that meaningful watershed stewardship requires the involvement of passionate citizens dedicated to science based management and equitable solutions. Thankfully California has its volunteer citizen scientists and community based watershed stewardship programs.

The Network plans to kick off 2017 with a series of webinars highlighting the strength of <u>citizen monitoring</u>. Presenters from all around the state will talk about how their citizen science programs are using question based science with appropriate quality assurance and quality control to better understand and care for our waters.

The Network will also be organizing a series of webinars centered on the theme <u>Safe-to-Swim</u>. The webinar series is planned to assist programs so they can apply monitoring science in a better and more cost effective way. Participants will also learn how others have managed Safe-to-Swim projects to eliminate or reduce pollution sources effecting water contact recreation. The Network has identified potential collaboration partners which include the Beach Water Quality Workgroup of Southern California, the Central/Northern California Ocean and Bay Water Quality Monitoring Group, the Inland Beaches Workgroup, the State Water Board's Department of Financial Assistance and USEPA.