



April 26, 2012

**Office of Water Quality Water-Quality Information Note 2012.06**

**Subject: Ad-Hoc Group for Important Components of Optical Sensor Use and Operation**

The Office of Water Quality (OWQ), National Water Quality Assessment Program, National Stream Quality Accounting Network in cooperation with the California Water Science Center (CA WSC), Office of Surface Water, and representatives of other USGS Centers are forming an Ad-Hoc Group to develop a Techniques and Methods (T&M) publication covering the most important components of optical sensor use and operation. The scope will cover topics from selection of sensors and field deployment to operation and maintenance, quality control, data collection and review, and data dissemination.

The purpose of forming this Group now is to develop standards and guidelines in anticipation of the growth in the number and types of optical sensors deployed in USGS. Such growth is a strong indicator of the need for early consideration of methods and best practices in this type of data collection and use. The Group will work closely with and includes members from the OWQ Continuous Water-Quality Committee (CWQC), a committee providing assistance and guidance to the OWQ on the development and use of water-quality sensors, including the tools needed to collect, review, and approve continuous water-quality records.

The Group will take advantage of activities that have been completed over the past two years that provide a foundation for next steps. The USGS is working with the broader community to advance the development and use of in-situ optical sensors to collect reliable and comparable water-quality data in rivers and streams. Much of the recent effort has focused on nitrate and organic matter, both of which are significant issues for drinking water and ecosystems. A joint USGS-CUAHSI workshop in 2011 on “In-Situ Optical Sensor Networks,” which was attended by 60 scientists and managers from government, academia and industry, led to a number of key recommendations (<http://pubs.usgs.gov/of/2012/1044>).

Chairs of the Group are Brian Pellerin and Brian Bergamaschi, USGS CA WSC. Water Science Center (WSC), Technical Office, and Program members include:

Brian Pellerin (Chair), CA WSC  
Brian Bergamaschi (Co-Chair), CA WSC  
Lisa Olsen, CA WSC  
Jessica Garret, IA WSC

Ken Hyer, VA WSC and Chair, CWQC  
Pat Rasmussen, KS WSC, and member, CWQC  
George Ritz, OWQ, Branch of Quality Systems  
Stuart Rounds, OR WSC and member, CWQC  
Terri Snazelle, Hydrologic Instrumentation Facility  
Yvonne Stoker, FL WSC and Chair, Phoenix Group  
Dan Sullivan, WI WSC and Co-Chair, Methods and Data Comparability Board  
Rick Wagner, WA WSC and member, CWQC  
Franceska Wilde, OWQ HQ

If you have any questions, please feel free to contact the Chairs, Brian Pellerin ([bpeller@usgs.gov](mailto:bpeller@usgs.gov)) or Brian Bergamaschi ([bbergama@usgs.gov](mailto:bbergama@usgs.gov)).

*WaQI Notes are archived on the Office of Water Quality web site,  
<http://water.usgs.gov/usgs/owq/WaQI/index.html>*

Signed,

The Office of Water Quality  
April 26, 2012

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