Session C7: Effective Communication of Water Quality Science to Stakeholders, Session 2

Room C124
3:30 – 5:00 pm

0541
C7-1

Beyond Graphs and Tables: Effective Communication of Water Quality Data by the Surfrider Foundation's Blue Water Task Force

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The Surfrider Foundation is a non-profit grassroots organization dedicated to the protection and enjoyment of our world's oceans, waves and beaches through a powerful activist network. The Blue Water Task Force (BWTF) is the Surfrider Foundation's volunteer-run, water testing, education and advocacy program. There are approximately 30 Surfrider Chapters participating in the BWTF. Surfrider volunteers are testing the water quality at beaches along the Atlantic, Gulf of Mexico & Pacific Coasts, including the tropical waters of Puerto Rico and Hawaii. These water testing programs measure bacteria levels at both marine beaches and freshwater sites and compare them to federal water quality standards established by the EPA to protect public health in recreational waters.

There is great diversity amongst the Blue Water Task Force programs. Each Surfrider Chapter has been able to design and implement their water testing programs to best use their available resources and meet their local needs.

In 2011, the Surfrider Foundation launched a new website to store, display and share BWTF water quality data at www.surfrider.org/blue-water-task-force. Each participating chapter has their own page with a google map of their sampling sites, data tables showing associated health risks and links to local chapter and other beach water quality information. The social media sharing features that this new website provides have allowed our chapters to improve the visibility of their programs and data within their local communities.

This presentation will demonstrate the variety of ways, both traditional and using emerging online technologies, that Surfrider Chapters across the country are communicating their water quality data to inform their members, local communities and decision makers about beach and watershed pollution issues. A case study from Newport, Oregon will be presented where successful communication and partnerships between the Newport Chapter's BWTF and City and State agencies have led to source-tracking studies, identification of pollution sources and implementation of solutions in the Nye Creek Watershed.

0498
C7-2

Methods for Improved Dissemination of Water-Resources Data by the US Geological Survey Arkansas Water Science Center

Robert Blanchard

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Water is an essential and important resource in Arkansas. Information on water quality and quantity is critical to ensure long-term availability and sustainability of water that is safe for drinking and recreation, and that is suitable for industry, irrigation, and fish and wildlife within the State. Water-resources data collected by the US Geological Survey (USGS) Arkansas Water Science Center (AWSC) are disseminated to the public through the internet. Available information on the internet includes online data publications, real-time data, and historical data for all water-resource disciplines. With respect to published reports, lag times between data collection and data availability could be a year or more. Because water-resources data are used in many aspects of water resource management that are time dependent, the USGS has strived to disseminate data more rapidly. To help facilitate this process, outreach initiatives (such as meetings with cooperators, other agencies, and the public) to disseminate data, descriptions of data collection methods, and preliminary interpretations of the data has increased. When provisional data are presented, emphasis is made that the data and interpretations are subject to revision pending final review and approval by the USGS. As a result of the increase in internet data dissemination and these outreach initiatives, the AWSC has seen increased diversity in partnerships with public, local, State, and Federal agencies which has led to an increase in knowledge of the water-resources in the State.

0086
C7-3

An Examination of Public Perception of Water Quality in Denver, CO

Jon Novick

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The Denver Department of Environmental Health routinely collects water quality samples from streams in the City of Denver, Colorado in order to evaluate risks of recreating in those waters. Results of the sampling are posted on a City website and on signs posted along streams that receive heavy recreational use during the summer. Those communication efforts have proven to be largely ineffective at communicating the risks of recreating in the City's streams to the public.

In order to determine how to more effectively communicate the risks of recreating in the City's streams, the Department of Environmental Health designed a short survey to assess public perception of water quality. A total of 105 surveys were given to people recreating in the South Platte River and Cherry Creek at Confluence Park on multiple dates during the summer of 2011.

Results of the surveys provided insight into public perceptions of water quality including existing conditions and perceived problems and sources. They also provided feedback on what activities the City of Denver should support to improve water quality and how to most effectively communicate information about water quality. In general, people recreating at Confluence Park perceive the quality of water in the streams to be better than it actually is. Users believed that litter, animal waste, and discharges from storm sewers were the largest source of pollution in the South Platte River and identified trash removal as their top choice for an activity the City should perform to improve river health. Those taking the survey were most interested in information related to safety, efforts and progress to improve water quality, and volunteer opportunities. Survey takers indicated a desire to receive that information on Facebook or signs at the waterfront in Confluence Park.

As a result of the surveys, it is clear that the City of Denver needs to take steps to more effectively communicate information about water quality and what is being done to improve it. In addition, Denver could enhance existing education campaigns to address areas where perceptions about water quality are incorrect and could do a better job of promoting volunteer opportunities.

0304
C7-4

Landscaping for Water: Addressing Water Quality Impairments One Backyard at a Time

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Privately owned lands comprise the majority of the land in many watersheds therefore, habitat improvement measures at the local backyard scale are critical to water quality protection and improvement. This pilot project addresses cost effective, small scale restoration through the implementation of "rain gardens as backyard wildlife habitats" in a community facing significant water quality and stormwater issues. Public awareness to recruit landowner participation is crafted around two themes: 1) What is good for wildlife is good for water quality, and 2) Help put our water supply on a pollution diet. While similar the two themes target slightly different audiences for broader appeal and marketing. Despite their importance as a drinking water supply, the local public is largely unaware that their local streams are listed as impaired. Volunteer water quality monitoring data, in conjunction with GIS based maps, are being used to educate the public about their water quality. GIS is helping to prioritize and target subdivisions for backyard improvements that provide the best "bang for the buck" from a water quality perspective. Additional volunteer stream monitoring is scheduled pre/post the bulk of the backyard habitat work. Project partners include local government, nonprofits, and corporations.