



Volunteer Monitoring News

A news update for – and by – the volunteer monitoring community



Issue No. 2

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About this Newsletter

Welcome to *Volunteer Monitoring News*, a new electronic newsletter written for – and by – the volunteer monitoring community. This newsletter will be constantly evolving and improving as it attempts to meet the networking and information exchange needs of volunteer monitoring programs from coast-to-coast. It will only succeed if you, the reader, submit calendar entries, articles and ideas for articles, highlights from your program activities, photos, and anything else you would like to share with your colleagues in the field.

Volunteer Monitoring News is intended to be brief, news-oriented, and issued electronically three times a year, with direct input solicited from your newsletters, websites, or Facebook pages – whatever you use to get the word out about your program. We are looking for stories with national applicability. Topics can include, but are not limited to, monitoring successes, new lab or field methods, data to action, new partnerships, improved approaches to sustaining your program, scientific findings, or tips on improving quality assurance.

If you have the time to search for, write, edit, or review new articles or track down events for our calendar, let us know. Contact Alice Mayo at mayio.alice@epa.gov to submit articles, photos or calendar entries for the next newsletter.

The contents of this document do not necessarily reflect the views and policies of the editors, nor does mention of trade names of commercial products constitute endorsement or recommendation of use.

Special Topic: Recap of National Water Monitoring Conference

The 8th National Water Monitoring Conference, held last May in Portland, Oregon, showcased a wide diversity of presentations, posters, field trips, and workshops of interest to volunteer monitoring practitioners. Over 60 volunteer program representatives and colleagues gathered at a special breakout meeting to discuss matters of importance to the volunteer community. (A special “shout out” to **YSI, Inc.** for providing travel support for 31 volunteer monitoring coordinators!) The top four topics of discussion were:

Data Management - The discussion centered on needs and problems: how groups review data for target audience to accept, how to deal with outliers that indicate contamination, the need for user-friendly data output tools, leveraging data movement along the local, state and federal user continuum, and the need for tools to upload data to EPA STORET via AWQMS to get data into the new USGS-EPA Water Quality Portal (the behind-the-scenes combination of USGS NWIS and EPA STORET databases, see <http://www.waterqualitydata.us/>.)

Volunteer Monitoring Movement Coordination - We discussed mechanisms to continue to share and network between conferences to provide support to each other and to new programs, reduce reinventing the same wheel, and move collective efforts forward. The new Volunteer Monitoring page on the NWQMC site, <http://acwi.gov/monitoring/vm/index.html>, was highlighted. This site has a map and directory of volunteer programs and includes a directory of state and federal agency contacts, resources, success stories, and issues of *Volunteer Monitoring News*. The EPA Volmonitor list serve will be used to send links to existing resources at a reasonable frequency to assist newer programs. A national Volunteer Monitoring Council was initiated this fall to serve as a “think tank” on other mechanisms to stay connected between conferences.



Volunteer monitors came to the 8th National Water Monitoring Conference to learn, network, and exchange information. (Photo courtesy of Christina Anderson, Wisconsin Department of Natural Resources)

Volunteer Data Usage and QA/QC - Uses for volunteer data other than submission for traditional Clean Water Act assessments was one focus of discussion, and included using data to calibrate local or regional water quality models, storm water monitoring, tracking implemented TMDLs, evaluating industrial complexes, detecting illicit discharges, developing water quality or health indices, detecting invasive species, demonstrating a need for nonpoint source projects, classifying unclassified water bodies, reporting to volunteers, land use planning, focusing on high water quality protection restoration effectiveness, developing more effective screening tools, linking water quality monitoring to biological community recovery, and developing water quality report cards.

Program Evaluation and Volunteer Learning - The need for program evaluation was discussed along with different perspectives on how to characterize evaluations. One example included temporal outcomes: for the short term, a change in knowledge; for the mid-term, a change in behavior; and for the long term, a change in water quality. Another perspective was to measure the “beans,” such as number of workshops, trainings, stations monitored, and samples analyzed. Also emphasized was the need to look for indicators to use when funding or monitoring timelines are not long enough to measure actual changes. Volunteer retention, recruitment and training were also discussed, along with the need to effectively use social media with a changing volunteer base.

In summary, it seems that year after year, the overriding issues facing volunteer monitoring programs remain the same, but evolution is occurring within each of the areas. Stay tuned for announcements from the Volunteer Monitoring Council and visit <http://acwi.gov/monitoring/vm/index.html> to provide comments, suggestions, success stories or information about your program for the map or directory. Also stay tuned for announcements about the next National Water Monitoring Conference in 2014!



What's New in Lab and Field

Brrr...

Current Minnesota volunteer monitors are being invited to collect information on the dates that ice forms and melts on lakes in their state. Duration of ice cover is a good indicator of climatic conditions. Volunteers simply email their data (including their own ID and the ID of their lake, the date ice completely formed, and the date ice completely melted).

Source: *Transparency Times*, the Newsletter of the MN Citizen Lake and Citizen Stream Monitoring Programs, September 2012.

Georgia Stream Habitat Survey

Georgia Adopt-A-Stream (AAS) has developed a two-page stream habitat assessment evaluating ten different aspects of a stream's physical condition and the health of its habitat. It complements the program's macroinvertebrate monitoring program for rocky and muddy bottom streams; data can be entered online, and supporting materials are also available. The assessment includes an image guide of color photos that helps explain each habitat parameter. For more information, go to

http://georgiaadoptastream.org/Manuals_etc/MonitoringForms/StreamHabitatSurvey.pdf

Source: *Georgia Adopt-A-Stream*, Volume 19, Number 5, September/October 2012.



Science Corner

Sudsy Water: Not Just in Your Washing Machine

In its Fall 2011 *Conservation Currents* newsletter, the Northern Virginia Soil and Water Conservation District provides some hints on how to tell if those suds in your stream are natural or come from man-made sources. Foam, suds, or bubbles can be natural; when plants and animals decompose, they release fatty acids that can break down the surface tension of water, allowing air bubbles to form on the surface when air is mixed with moving water. Weather factors such as temperature and rain can contribute to the buildup of natural foam. Man-made sources of stream suds include over-fertilized lawns, car wash runoff, sanitary sewer or septic field failure, and some industrial discharges. Hints your suds are natural: the foam is light tan, brown, or white; it has an earthy, fishy, or “fresh cut grass” odor; it occurs at many different places along the stream and can cover large areas; and it increases after rain storms. Hints that it’s time to report a problem: the foam is white and either perfumed, like detergent, or has a foul sewer odor; it accumulates near the source of the discharge but dissipates quickly; and it is not related to rain storms.

Source: Northern Virginia Soil and Water Conservation District *Conservation Currents*, Volume 39, issue 1.



Sustainable Programs

Black River Action Team (BRAT) Thinks “Outside the Box” for Funding and Partnership-Building

Kelly Stettner, founder and director of Vermont’s Black River Action Team (BRAT), has developed a file of fundraising ideas that are sustainable and flexible. Because they rely on local effort and engagement, they also help build community and stewardship. Says Stettner, “Grants are ephemeral and capricious, and I had to find something more reliable.” Some of her ideas are already working, and others are still in development.

Recycling e-waste for cash: The BRAT collects empty inkjet and laser cartridges, old or broken cell phones, GPS units, iPods, MP3 players, and even laptops and mails them to Funding Factory (www.FundingFactory.com) for recycling. Funding Factory assigns a point value to each item which can be redeemed in its online store or for cash. It also provides boxes, shipping labels, promotional items, media kits and customer service. Potential partners include computer



BRAT volunteer Bill Manner samples the Black River in Weathersfield, VT (Photo courtesy of Kelly Stettner)

and phone stores that can serve as collection points (Stettner refers donors to the area transfer station/recycle center, and collects items there every 2-3 weeks to send to Funding Factory). The BRAT's business supporters can also box up their own items and send them directly to Funding Factory, which will credit BRAT for those items.

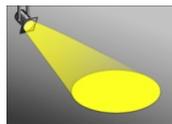
Adopt-the-River: Stettner has designed an agreement that allows businesses or organizations to “adopt” a selected reach of the Black River or one of its tributaries or associated ponds, lakes, or wetlands. Adopters pledge to keep the reach clear of trash (usually by participating in the annual BRAT RiverSweep cleanup event) and also commit to some additional project or activity that relates to the river. She offers a list of ideas that range from fun to scientific – for example, bird watching, wildlife tracking, native tree planting, or water quality monitoring. The BRAT is developing an interactive online map of the entire watershed to showcase the activities happening in each adopted section of the river. She develops press releases for adopters and connects them with each other through events.

Safer Swimming: Stettner had trained BRAT volunteers to take *E.coli* samples at commonly used swimming holes along the river and convey them to a certified water quality lab. However, at \$25 per test, collecting weekly samples from five swimming holes over a 12-week season would total \$1,500 (\$300 per swimming hole). She has therefore developed a new “tweak” to the Adopt-A-River program: for a \$500 annual commitment, a business or organization can adopt a swimming hole of their choice. The \$500 pays for weekly testing, an adoption certificate for the business to display in their office, plus a sign installed at the site (with landowner's permission) announcing the adoption campaign, the adopter's name, and the weekly *E.coli* results. The program is just beginning but shows promise!

For more information, visit the BRAT website at <http://blackriveractionteam.org/wp/>.



Spotlight On...



Paddle Georgia 2012

Name something that combines volunteer recruitment, water quality monitoring, on-the-river instruction and education, nonprofit-state collaboration, fun, and paddles. Answer: the 2012 Paddle Georgia event, held June 16 - June 22, 2012.

Paddle Georgia is an annual event sponsored by the Georgia River Network. Trainers and coordinators from Georgia Adopt-A-Stream, accompanied by scientists from the GA Environmental Protection



Participants in 2012 Paddle Georgia.

Division, canoed and kayaked down 105 miles of the beautiful Altamaha River along with 350 participants in the event. The trip included educational



Volunteer monitoring was a significant part of Paddle Georgia.

programs on the river's cultural and natural history, tours of facilities and historic sites located along the river, and nightly games and entertainment. It also offered Paddle Georgia participants the chance to learn about water quality monitoring and the current condition of the river from the Adopt-A-Stream staff and volunteers, who were sampling 32 targeted tributaries and 44 sites along the mainstem. In addition to gathering snapshot data and educating paddlers about the river, one key result of the event was the certification of over 30 participants and teachers in the

Adopt-A-Stream chemical monitoring methods. Data from the event were shared with watershed organizations and the Environmental Protection Division.

Registration for Paddle Georgia 2013 begins February 2013. For more information on Paddle Georgia, visit www.garivers.com. For information on Georgia Adopt-A-Stream, visit www.georgiaadoptastream.org.



Apps/Publications/Videos/Web Tools/New Releases

Minnesota Citizen Lake and Stream Monitoring Program Training Videos

The Minnesota Pollution Control Agency (MPCA) has produced a set of short training videos for its volunteer lake and stream monitors which serve as excellent refreshers. The set includes a welcome video introducing the program, as well as videos on safety while monitoring and procedures for introductory and more advanced stream and lake monitoring. Visit the MPCA Citizen Lake Monitoring Program website to view the videos. The safety video, on YouTube at <http://www.youtube.com/watch?v=2-rlnVRxmcM&feature=youtu.be>, provides generic safety advice of value to any volunteer monitoring program.

FracTracker Alliance Website Maps Hydraulic Fracturing Wells

The FracTracker Alliance is a non-profit organization dedicated to enhancing the public's understanding of the impacts of the global shale gas industry by collecting, interpreting, and sharing data and visualizations through its website. Maps are available by state: PA, WV, OH, NY, and US-wide. The website includes data, photos, a calendar of shale gas events, and more. Visit <http://www.fractracker.org/>.

Phyto Smartphone App Helps Volunteers Identify Marine Phytoplankton

Phyto is a free smartphone application that helps volunteers identify marine phytoplankton by providing images of salt water species taken with a light microscope. It also includes a flash card game to help volunteers improve their ID skills. *Phyto* was developed by volunteer Shawn Gano with the Phytoplankton Monitoring Network (PMN), a national network of volunteers monitoring for coastal algal blooms. The goals of the PMN are to increase public awareness about harmful algal blooms (HABs) and maintain an extended monitoring area along U.S. coasts throughout the year. The PMN is managed by the National Oceanic and Atmospheric Administration. For more information about the PMN, visit <http://www.chbr.noaa.gov/pmn/>. To see the smartphone app, visit <http://www.gano.name/shawn/phyto/> (for iPhone and iPad) or http://www.gano.name/shawn/phyto_android/ (for Android phones).

New How's My Waterway? Mobile Website

On October 18, 2012, EPA released a new mobile app and website, ***How's My Waterway?*** The site provides the public with plain English information on local waterways based on water quality assessment reports that states provide to EPA under sections 305(b) and 303(d) of the Clean Water Act. Its local-scale (roughly 5-mile radius) search retrieves information on whether and when a waterway was assessed, what pollution was reported, and what has been done to improve conditions. ***How's My Waterway?*** provides simple descriptions of each major category of pollutants, where the pollution comes from, its effect on the environment and on beneficial waterway uses, what citizens can do to help, and where to find more information. It also identifies whether a polluted waterway has TMDL cleanup plans or polluted runoff control projects. For more information, visit www.epa.gov/mywaterway.



Santa Barbara Channelkeeper YouTube Video Series, The Watchdog Diaries

The Santa Barbara Channelkeeper has been chronicling its targeted monitoring efforts using video in order to shed light on the work they do. The videos have proven to be effective advocacy tools that focus on different projects or issues, such as stormwater runoff, flow fluctuation, and the impact of trash. To see the videos, visit http://www.youtube.com/user/channelkeeper?feature=results_main

iPhone Application for Charleston Waterkeeper

Charleston Waterkeeper has designed an app to engage and involve citizens in, on, and around Charleston's waterways. The app allows citizens to report problems such as oil spills, discharging pipes, excessive marine debris, abandoned boats, and under water hazards using a reporting process that is as easy and informative as possible. It also helps citizens find

information about local waters and follow the tweets and blog postings of the Charleston Waterkeeper organization. For more information, visit www.charlestonwaterkeeper.org

University of Northern Kentucky “Water Quality” App

"Water Quality" app Version 1.0, developed for k-12 but also in use by volunteer monitors, is now available on the Apple App Store for iPads, iPhones, and iPod Touch. The app includes stream study data collection and information to understand the data that were collected for site profiles, chemical and bacterial sampling, and macroinvertebrates (digital field guide and Pollution Tolerance Index calculator). The app costs \$4.99, and most of the revenue goes directly back into water education programs and maintenance of the app. River on the Web (ROW) is the accompanying website with more water quality information and curriculum: visit <http://row.nku.edu>



Upcoming Events

If you would like to list your upcoming volunteer monitoring-related event in this newsletter, please provide the date, location, and a brief description to mayio.alice@epa.gov.

March 2013

Confluence 2013. March 16, 2013, Gwinnett Environmental and Heritage Center, Buford, Georgia. Confluence is designed to support and educate Georgia Adopt-A-Stream volunteers. A celebration of the 20th anniversary of Georgia Adopt-A-Stream will be part of the conference. For more information, visit www.GeorgiaAdoptAStream.org

April 2013

Michigan Lake and Stream Associations Annual Conference. April 26 - 27, 2013 Doubletree Bay City –Riverfront, Bay City, Michigan. The MLSA Annual Conference is the site of the annual volunteer training for Michigan’s Cooperative Lake Monitoring Program. Attendance at the CLMP training sessions is free; conference registration is not required. For more information, visit www.mymlsa.org/mlsa-52nd-annual-conference. For more information about the CLMP, visit www.micorps.net.

May 2013

River Rally 2013. May 17 - 20, 2013, St. Louis, Missouri. For more information, visit www.riverrally.org

Society for Freshwater Science (formerly NABS), Annual Meeting 2013 Energy Production and Aquatic Biodiversity: Understanding the Threats, Planning for Ecosystem Management. May 19-23, 2012, Jacksonville, FL. For more information, visit <http://www.freshwater-science.org/Annual-Meeting/2013-Jacksonville.aspx>

Volunteer Monitoring News is a free publication produced three times a year and distributed electronically. It is posted on the Web at http://acwi.gov/monitoring/vm/newsletters.html#anchor_current_news.

The editorial board currently includes Dan Boward; Danielle Donkersloot; Renee Gracon; Linda Green; Danelle Haake; Elizabeth Herron; Barb Horn; Rebecca Kauten; Nate Keener; Jo Latimore; Alice Mayo; Kelly Stettner; Thomas Tissue; and Julie Vastine. Contributions of articles, photos, and announcements from volunteer monitoring organizations are encouraged but their inclusion in future editions cannot be guaranteed. All contributions must include contributor's name, address, affiliation, email, and phone number. Contributions and subscription inquiries should be submitted to mayio.alice@epa.gov.

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