



Using Publicity and Community Outreach to Retain Citizen Stream Monitoring Volunteers

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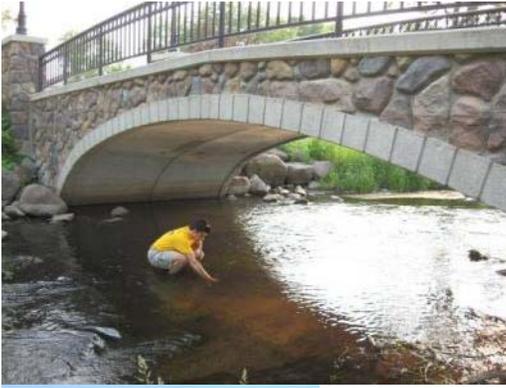
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Wisconsin's Volunteer Stream Monitoring Program



- Goal: To help preserve and protect Wisconsin's over 15,000 lakes and 86,000 miles of rivers
- To accomplish:
 - First understand how they function
 - Then take note of their status

Offering citizens...



- Multiple opportunities to be part of learning and monitoring process
- Three levels
 - To accommodate varied interests & time availability of citizens
 - Can assess interest with less \$/time commitment (on part of volunteers *and* coordinators) and build from there



Levels in Which Citizens Can Participate

- Level 1 – Educational
 - Introduces citizens to monitoring basics
 - Educates about connection between land & water quality
- Level 2 – Status and trends
 - A more intensive monitoring experience
 - Must follow a specific schedule
 - Utilize DNR methodologies & databases
- Level 3 – Research projects
 - Unique opportunity to address a specific issue





Community Outreach Project

- Program concerns
 - Community outreach about program lacking
 - Feedback to volunteers about data results limited
- Bret Shaw arrives on the scene...
 - Life Science Communications Specialist
 - Adopts program as his “getting started” project
 - Surveys Level 2 volunteers to determine needs (2008)

Volunteer Monitor Survey Results

- Average age: 53
- 64.7% male/35.3% female
- 70% of respondents had been volunteering for 3+ years
- 52.9% work part-time; 27.5% retired
- Largest percentage of respondents (49%) collected data 5-6 times in past year



Motivations for Volunteering

| <u>Reasons</u> | <u>Average</u> |
|--|----------------|
| ■ <i>1-5 Scale (1=Not at all; 5=Very much)</i> | |
| ■ Support conservation of natural habitat | 4.51 |
| ■ Develop new skills, knowledge or experiences | 4.41 |
| ■ To detect problems in stream health to be responded quickly to if needed | 4.29 |
| ■ For personal satisfaction and achievement | 4.08 |
| ■ To increase awareness of stream health problems | 4.06 |
| ■ To do something interesting | 3.98 |
| ■ Develop new skills, knowledge and experiences | 3.76 |
| ■ Committed to conservation of particular stream | 3.75 |
| ■ To use existing skills, knowledge and experiences | 3.75 |
| ■ To get outside and explore new areas | 3.75 |
| ■ Streams are very important to somebody I respect | 3.75 |
| ■ To meet new people | 2.65 |

Evaluation of Program Effectiveness

Attitudes

Average

1-5 Scale (1=Not at all; 5=Very much)

- | | |
|--|------|
| ■ Confident in quality of data I collect | 4.53 |
| ■ Understand purpose of monitoring program | 4.47 |
| ■ Data I collect as a volunteer is valuable | 4.27 |
| ■ The data collected contributes to conservation | 4.06 |
| ■ I am knowledgeable about the meaning of the data | 4.04 |
| ■ The program helps preserve stream ecosystems | 3.90 |
| ■ I have the tools I need to promote awareness of stream health in my community | 3.49 |
| ■ The data I collect is being used as effectively as possible to promote conservation issues | 3.29 |
| ■ Other conservation groups in my area are aware of the stream monitoring program | 2.98 |
| ■ Local media is aware of stream monitoring data | 1.94 |

Satisfaction and Commitment to Program

| <u>Statements</u> | <u>Average</u> |
|--|----------------|
| <i>1-5 Scale (1=Not at all; 5=Very much)</i> | |
| ■ Plan to stay involved at least for coming year | 4.71 |
| ■ My time volunteering w/the program is time well spent | 4.61 |
| ■ I'm proud of my work volunteering with the program | 4.41 |
| ■ My efforts volunteering w/the program are rewarding | 4.31 |
| ■ I would refer others to the program | 4.31 |
| ■ I am satisfied with my experiences as a volunteer | 4.22 |
| ■ My volunteering makes a difference in protecting the environment | 3.76 |
| ■ The citizen stream monitoring program does a good job getting the word out about the data we collect | 3.02 |

Information desired by Volunteer Monitors

| <u>Statements</u> | <u>Average</u> |
|---|----------------|
| <i>1-5 Scale (1=Not at all; 5=Very much)</i> | |
| ■ Articles demonstrating how data could be used | 4.57 |
| ■ Articles demonstrating how the citizen monitoring data have been used | 4.55 |
| ■ Written descriptions to understand what the data mean | 4.55 |
| ■ Graphs showing changes in data over time | 4.51 |
| ■ News developments about stream issues | 4.31 |
| ■ Articles about how the program has made an impact | 4.31 |
| ■ Articles written by biologists | 4.16 |
| ■ Case studies on stream conservation | 4.14 |
| ■ Articles written by volunteers | 3.71 |
| ■ Interviews with volunteers | 3.49 |

Addressing Identified Needs



- Identifying stories to promote where citizen stream monitoring has made a measurable impact in the community
- Targeted media campaign promoting availability of Level 2 Stream Monitor data
 - Media outlets where these volunteers have a presence and other relevant statewide publications
 - Radio show in Madison
 - Trout Unlimited Web site

News Article Examples

- “Former Teacher Educates Community”
 - *Cambridge News*, Dec. 2008
- “Monitors Work To Reopen Local Rivers”
 - *Fond du Lac Reporter*, Oct. 2008
- “TU Chapters Restore & Watch Streams”
 - *Wisconsin Outdoor News*, Nov. 2008
- “Local Contributes to Preserving Stream”
 - *Marshfield News*, Jan. 2009
- “Monitors Witness Natural Changes”
 - *Prairie du Chien Courier Press*, Feb. 2009



Addressing Identified Needs

- Offer new outreach materials to help volunteers communicate more effectively about the program in their communities
 - e.g., brochures that volunteers can give out when asked about their stream monitoring work

Watching Our Waters

"I like monitoring because it's an excuse to get out and stand in the river. I just feel a little bit like Huck Finn when I am out there."
- Laura DeGoller, Fond du Lac

"I would encourage people to monitor especially if they have the time. I would like to see more young people involved as well because they represent the future."
- Gordy Braun, Appleton

"I felt a sense of accomplishment monitoring the streams. Anytime you can help conservation and water quality by gathering information, you feel a sense of satisfaction."
- Harvey Colruie, Iola

If you are interested in finding out how you can become a citizen monitor or more about how you can use citizen stream monitoring data, contact:

Kris Stepenuck
(608) 265-3887
kfstepenuck@wisc.edu

For more information about volunteer stream monitoring, please visit:
watermonitoring.uwex.edu/wav

Wisconsin's Citizen-Based Water Monitoring Network

Concept Design courtesy of UW-Madison, Life Sciences Communication 530 students: Kelsi Hendrickson, Ryan Kupfer, and Rachael Herschleb
Graphic Design by: Jennifer Lach & Amy Torrey, UW-Extension, Environmental Resources Center
Photography by: Kris Stepenuck & Frank Fetter

YOUR NEIGHBORS
Watching Wisconsin's Waters

Wisconsin's Citizen-Based Water Monitoring Network

Addressing Identified Needs

- Offer new outreach materials...
 - e.g., website resources about how to
 - connect with local media
 - make community presentations
 - seek funds from community sponsors
 - write letters to the editor
 - and more!



Community Outreach

Part of the mission of the Citizen-based Water Monitoring Network is to build a network of informed citizen advocates for management and protection of Wisconsin's water resources. A component of this is to share with local communities the information that is collected by citizen monitors. By sharing information about citizens' efforts and results in an easy to understand format, the hope is that as many people as

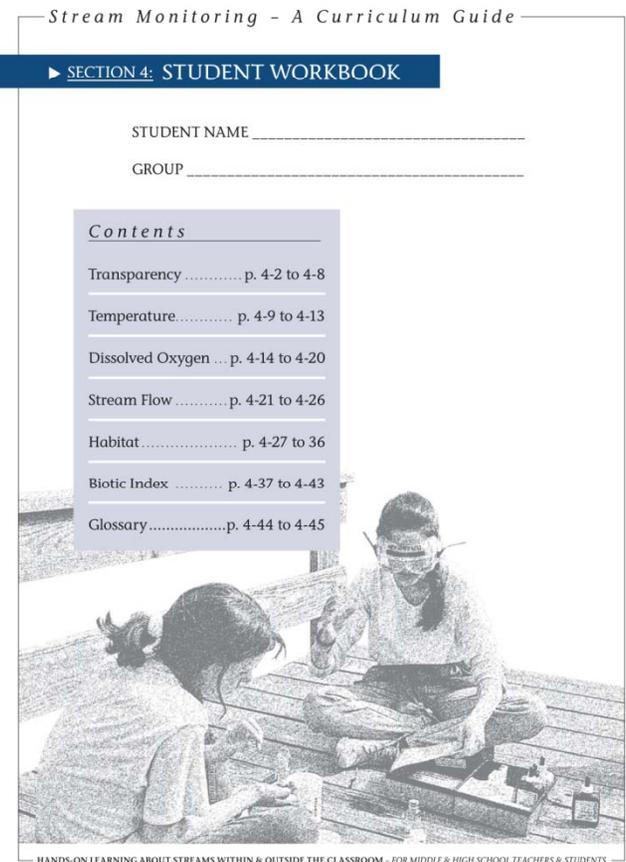
Additional Information

- About this Outreach Project
- Become a Stream Leader
- Develop News Articles
- Find Brochures to Share
- Fundraise Successfully
- Link with Schools
- Present to Local Groups
- Reach Out to Radio and TV
- Write Letters to the Editor

<http://watermonitoring.uwex.edu/outreach/index.html>

Addressing Identified Needs

- Reach out to relevant stakeholders
 - e.g., Science teachers/schools
 - Developed middle/high school curriculum based on existing program
 - Linked with Wisconsin model academic standards
 - Piloted fall 2009
 - Citizen monitors assisted with school field trips



Addressing Identified Needs

- Stream leaders' workshop



Addressing Identified Needs

- Create updated graphics to make data easier to understand for general public

Your Neighbors

Making a Difference

Members of citizen-based stream monitoring groups work in partnership with the Wisconsin Department of Natural Resources (WDNR), UW-Extension and the River Alliance of Wisconsin.

They track water temperature, clarity, dissolved oxygen levels, insects and pH of various streams throughout the state. All these factors help determine what types of fish, insects and other organisms can live in the stream.

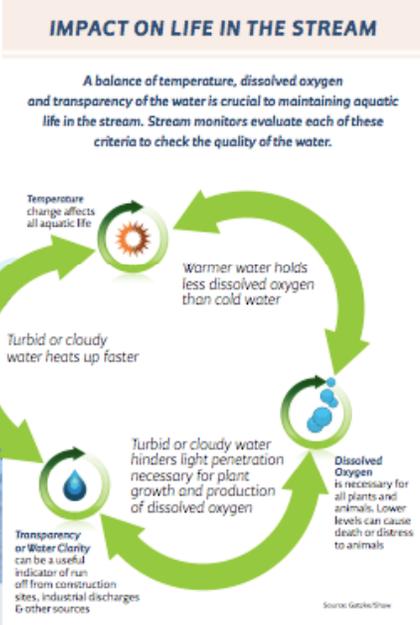
The continuous cycle of data collection helps patterns and changes in the health of a given stream to be tracked. Citizen stream monitors check these variables at least once a month between spring and fall.



Citizen Stream Monitoring . . .

IMPACT ON LIFE IN THE STREAM

A balance of temperature, dissolved oxygen and transparency of the water is crucial to maintaining aquatic life in the stream. Stream monitors evaluate each of these criteria to check the quality of the water.



Temperature change affects all aquatic life.

Warmer water holds less dissolved oxygen than cold water.

Turbid or cloudy water heats up faster.

Turbid or cloudy water hinders light penetration necessary for plant growth and production of dissolved oxygen.

Transparency or Water Clarity can be a useful indicator of runoff from construction sites, industrial discharges or other sources.

Dissolved Oxygen is necessary for all plants and animals. Lower levels can cause death or distress to animals.

Source: Gatzke/Straw

Your Neighbors

Saving Our Streams

Monitoring data can be used for:

- Stream protection and restoration
- Information for the media to use for articles
- Sharing with service and environmental groups
- Presentations to schools
- Background information for policy makers
- Community awareness and planning meetings

With 86,888 miles of streams and rivers in Wisconsin, volunteers are a great resource to their local communities. Plus, scientists at the WDNR use these valuable data about Wisconsin's streams to help assess which waters need attention, or which streams are presently healthy.



. . . Watching Our Waters

Were We Successful?



- Citizens felt their data were being used as effectively as possible to promote conservation issues
- Believed program was doing a good job getting the word out about the data

Were We Successful?



- Project's most useful elements:
 - educational curriculum
 - "pocket" brochures
 - media stories
 - stream leader workshop



Helping Grow Our Program (Project Summary)



- Volunteer confirmed our feelings that data use and program awareness were limited
- Developed news articles, curriculum and outreach tools for citizens
- After 18 months, feedback was positive we had met our goals
- Need to carry on with these efforts

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