

Civic Engagement

Introduction

The Zumbro River Watershed includes a 501(c) 3 nonprofit organization, the Zumbro Watershed Partnership (ZWP), which is focused on improving water quality on a watershed-scale. It is a member-driven organization, which works with citizens and LGUs to restore the natural and social benefits of a healthy watershed through education and collaborative projects. ZWP was founded in 2004, and is composed of citizens and elected officials. The ZWP board structure includes representatives from all six counties within the ZRW (Dodge, Goodhue, Olmsted, Rice, Steele, and Wabasha). Those envois include six County Commissioners, six SWCD Supervisors, and 13 citizen members elected by the membership.

Rooted in strong partnerships, ZWP has promoted and facilitated collaboration among entities throughout the watershed for over a decade. This momentum generated the *Zumbro River Watershed Management Plan (2007-2012)*, the *Zumbro Watershed Management Plan: Sediment Reduction Component (2012)*, and the *Interim Zumbro Watershed Management Plan (2013)*. A notable working knowledge of the watershed and its residents, coupled with existing ZWP initiatives to promote the watershed approach generated an effective environment for WRAPS stakeholder engagement.

The ZWP was elected to serve as the convening and facilitating entity throughout the WRAPS process. This afforded LGUs the ability to participate and contribute substance, without the need to allot FTE hours for coordination and document assembly.

WRAPS Planning & Process Design

Encompassing nearly 1 million acres, the Zumbro River Watershed is a landscape with much diversity. Such variances include geography, hydrology, land use, and socioeconomic influences. To facilitate more in-depth discussions and capture these unique influences, the WRAPS meetings were held in three lobes across the watershed: the Lower Zumbro River lobe, Middle & North Forks Zumbro River lobe, and the South Fork Zumbro River and Lake Zumbro lobe.

Zumbro River Watershed WRAPS began with a ‘kick off’ meeting in March 2016, followed by three lobe meetings in June, August, and November 2016. The lobe meetings functioned as an update for the new watershed science that consisted of water quality impairments and modeling, geographically targeted sources of nutrient loading, and discussions of restoration and protection priorities and strategies. Guest speakers also made presentation at the lobe meetings on the status of Lake Zumbro, Rochester’s storm water and wastewater facilities, and Discovery Farm’s water quality monitoring. A finale meeting was held on January of 2017, where a draft section of the ZRW WRAPS was presented to attendees, followed by discussion and feedback on the document. All meeting agendas and presentation can be found on the ZWP web site under the WRAPS tab.

In 2013, prior to the WRAPS process, the consulting firm The Research Edge LLC. was hired by the ZWP to assess the current knowledge and attitudes of ZRW residents. Participants of the survey resided within the watershed and were contacted via phone. The ‘Information Sources’ component of the survey revealed that watershed residents rely heavily on traditional media, with online or public forums as the strongest alternative to newspapers or magazines for local water quality and flooding issues. The stakeholder outreach conducted in the ZRW WRAPS reflects this preference.

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Before commencing the ZRW WRAPS, several stakeholders within the ZRW assisted with the Cannon River Watershed WRAPS pilot. At the Cannon finale meeting, stakeholders completed a short survey on the WRAPS process. That feedback has been heavily incorporated into the ZRW WRAPS, specifically the depth of involvement with SWCDs, county staff, and agricultural industry representatives.

Implementation

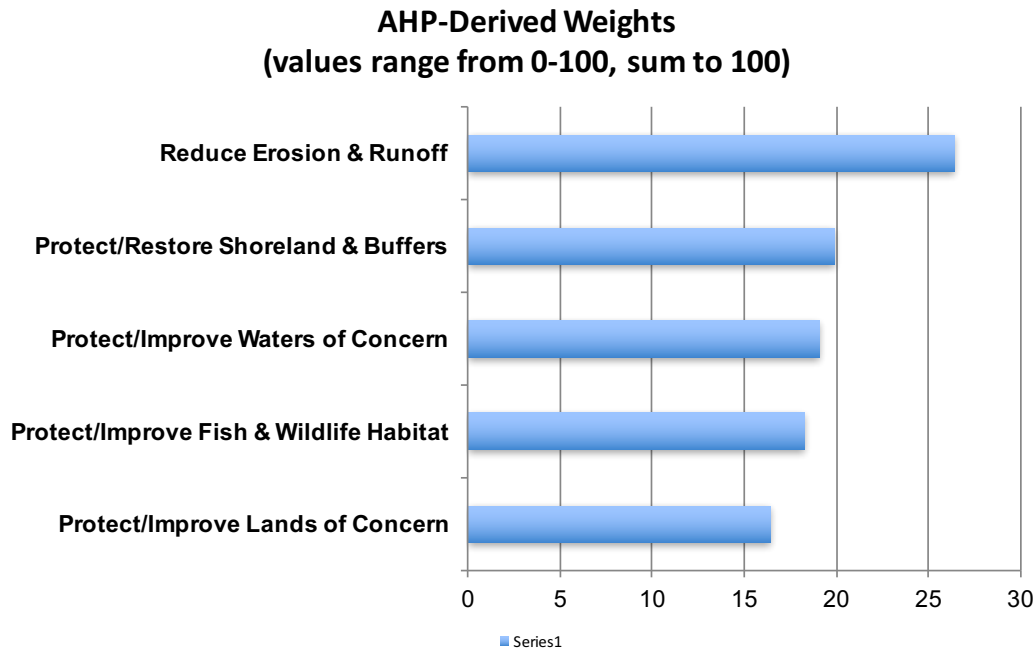
The engagement of stakeholders and watershed residents during the ZRW WRAPS had two distinct components. Those parties heavily involved in the process on a professional level (SWCD's, county staff, govt. agencies, commodity group representatives, etc.) were greatly engaged via the three tools: HSPF modeling, the synthesis step of the Zonation values-based model, and the nitrogen and phosphorus best management practices spreadsheets (N & P BMP tools), as well as the lobe meetings. In contrast, watershed residents as a whole were engaged in the WRAPS progression through lobe meeting attendance, the Zonation survey and ZWP platforms (*Waterways Speaker Series*, published literature, and the ZWP website and Facebook page).

Zonation Modeling and Civic Engagement

The Zonation values-based model was used in a civic engagement process that commenced at the ZRW WRAPS Kickoff Meeting and at a Water Ways Speaker Series Meeting. As part of this process, meeting participants decided on what landscape features were valued and the rankings of those valued features within the model by filling out a survey. The survey was administered to attendees Zumbro WRAPS Kick-off Meeting (N=26) in March, to attendees of the April *Waterways Speaker Series* Meeting (N=27), and to members of the interested public during Earth Day activities (N=35). Figure ___ below summarizes the rankings of those landscape features (See Appendix _____ for details on the approach and methods). The protection and restoration priority maps from the Zonation output are contained in section 3.1 of this Report.

The survey comprised of pairwise comparisons was used to solicit the preferences of individuals. Features used in the comparison were based loosely on the DNR's five-component healthy watershed approach, with the addition of alternative land uses or economic features representing a social component. The pairwise survey was structured to gather value preferences for an overall conservation strategy. Each individual taking the survey used his or her judgment about the relative importance of all elements at each level of the hierarchy. The relative importance values included "equal," "prefer," and "strongly prefer." The use of abbreviated pairwise importance values helped reduce the cognitive burdens associated with a large number of pairwise comparisons. Individual responses were aggregated with a geometric mean, and the pairwise comparison matrix was constructed to compute the feature-specific weights consistent with the analytic hierarchy process (AHP).

Figure ____. Broad-scale weights used in the Zonation model from a survey using the analytic hierarchy process (AHP); weights sum to 100).



Stakeholder Outreach

The watershed approach and WRAPS have been largely discussed in the ZRW. This has been done through a variety of mediums, both preceding and throughout the ZRW WRAPS process.

The Zumbro Watershed Partnership hosts and promotes the free monthly *Waterways Speaker Series* in Rochester, Minnesota. This platform affords the public an opportunity to engage with scientists, managers, and commodity groups. Presenters discuss the watershed approach, innovative projects, and grass roots efforts within our region that promote cleaner water and reduce flooding.

Recent *Waterways Speaker Series* topics include:

- November 2016: *Mapping Our Way to Cleaner Water* presented by Bill Huber, MN DNR Buffer Mapping Hydrologist
- October 2016: *Farmer-led Solutions for Water Quality Improvement* presented by Jeremy Geske, Minnesota Agricultural Water Resource Center (MAWRC)
- November 2015: *Solutions to Stormwater Pollution* presented by Megan Moeller, Rochester Stormwater Educator
- February 2015: *How Farmers Are Protecting Water and Soil Resources* presented by Ryan Buck, Farm and President of the Minnesota Corn Growers
- December 2014: *A "Watershed Approach" to Restoring and Protecting the Zumbro* presented by Justin Watkins, MPCA
- February 2014: *Using Civic Engagement to Mobilize Clean Water Projects* presented by Barb Radke, University of Minnesota Extension

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To best reach target audiences and stakeholders on watershed issues, monthly newspaper articles and the quarterly newsletter *The Zumbro River News* are published. Written by Kevin Strauss, ZWP Education Coordinator, these pieces highlight the watershed approach, provide updates on the ZRW WRAPS process and innovative water quality projects, and are a source for news on water and river issues. Both literary formats are distributed throughout the watershed. The monthly newspaper articles are published in community newspapers, whereas quarterly newsletter is distributed to ZWP members and community hubs (libraries, community centers, etc.), and posted on the ZWP website.

The ZWP website serves as a repository for the ZRW WRAPS information, including meeting announcements, contact information, and a WRAPS Library. The *Zumbro River Watershed Management Plan (2007-2012)* and *Zumbro River Watershed Interim Watershed Management Plan (2013)* can also be found at this site, along with related publications & reports, data & mapping, news articles, and web links.

Meetings

The ZWP served as both host and facilitator for meetings held throughout the WRAPS process (see Table ___). This convening of stakeholders offered valuable feedback and input from entities across the watershed. These meetings also functioned a platform to voice concerns, values, and priorities, that then manifested into strategies that vary among each region of the ZRW. Examples of these contrasting stratagems can be found in the _____ section of this document.

The meetings highlighted in Table NUMBER were directly associated with building the WRAPS. Numerous watershed-wide meetings and initiatives preceded the ZRW's participation in, but greatly informed, the WRAPS process. These include, but are not limited to:

- March 2015: Minnesota Buffer Summit in Mazeppa, Minnesota
- 2012-2015: PAC (Project Advisory Committee) Meetings. Updates on watershed approach, modeling scenarios determined, etc.
- June 2012 – July 2014: *Slow the Flow* Educational Campaign (ZWP). This educational initiative was designed with short and long-term strategies to engage residents, LGUs, landowners, and businesses to take action to slow down and reduce the amount of water running into the Zumbro River. Part of this campaign resulted in the installation of 126 bridge signs, and 12 education signs throughout the watershed; the idea being, once you know the name of a creek, you can then begin to develop a relationship with it/foster stewardship.
- February 2015 MPCA Professional Judgment Group Meeting for Monitoring and Assessment, and Biological Stressor Identification in the ZRW
- 2012 & 2013: TMDL meetings and Zumbro Watershed 1st & 2nd Colloquiums that manifested into the *Zumbro Watershed Management Plan: Sediment Reduction Component (2012)*, and the *Interim Zumbro Watershed Management Plan (2013)*

Lobe Meetings

Throughout the summer and fall of 2016, three lobe meetings were held. Subsequent follow-up consultations took place during that time with county, city, and SWCD staff, and crop consultants (see

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Table _____ below). This engagement was the primary source for stakeholder input for the Zumbro WRAPS, and its value cannot be over emphasized. Upon receiving an overview of the WRAPS tools (HSPF modeling, N & P BMP spreadsheets, and zonation), key end users collaborated to set priorities and provide examples of goal attainment based upon lobe-specific knowledge of resources. Participants then vetted the recommendations and generated scenarios at length to ensure adoption was feasible. The detail to which the Zumbro WRAPS addresses priorities and strategies in each lobe of the watershed is a testament to that participation.

Table _____ : Zumbro WRAPS & TMDLs Meeting Summaries

Date	Title/Topic	Attendees
November 20, 2014	ZWP Professional Advisory Group. Watershed stakeholders discussed several potential management or BMP scenarios that could be set-up and run with the ZRW HSPF model with LimnoTech consultants. A total of ten (10) scenarios were developed to estimate the effect of potential management practices on sediment and nutrient transport and delivery to local tributaries, Lake Zumbro, and the watershed outlet.	County, city, & SWCD staff; state agency staff; ZWP Board members and staff.
March 19, 2016	Zumbro WRAPS Kick Off Meeting	County, city, & SWCD staff; elected officials; state agency staff; urban & rural residents; landowners; lakeshore residents; farmers; ZWP Board members; commodity group representatives; The Nature Conservancy
April 14 th , 2016	ZWP Water Ways Speaker Series: <i>Choices, Choices: Deciding What's Important in the Zumbro Watershed</i> presented by Paul Wotzka, ZWP. What landscape features and conservations measures are most valued in the ZRW? Attendees filled out a questionnaire and ranked their priorities as part of the Zonation values-based modeling for ZRW WRAPS.	Urban and rural residents; farmers; academics; ZWP members and staff; county, city, and SWCD staff; elected officials; lakeshore residents
June 7 th & 8 th , 2016	1 st Round Lobe Meetings: An overview of the Zumbro Watershed Management Plan (2013); lobe characteristics and impairments/stressors; Farmer-led water quality research and programming; 1 st round of HSPF modeling scenarios; results from Zonation survey/systematic	County, city, & SWCD staff; elected officials; state agency staff; urban & rural residents; landowners; lakeshore residents; farmers; ZWP Board members; commodity group representatives; The Nature Conservancy

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	conservation	
June 9 th , 2016	ZWP Water Ways Speaker Series: <i>SimZumbro: High Tech Tools for Cleaner Water</i> presented by Ben Roush, MPCA. An overview of water quality models (HSPF), how they can incorporate changes in land use and BMPs, and management scenarios developed to realize these changes.	Urban and rural residents; farmers; academics; ZWP members and staff; county, city, and SWCD staff; elected officials; lakeshore residents
July 19, 2016	BMP Tool Meeting with Crop Consultants: An overview of the N/P BMP Tool & applications in the ZRW; discussion of U of MN approach (BMP Tool) versus IA & IL, and are the BMP Tool assumptions made realistic	Crop consultants from the ZRW
August 9 th & 10 th , 2016	2 nd Round Lobe Meetings: Review of sources & pathways of sediment & nutrients in ZRW; soil organic matter – importance & how it is gained/lost; nutrient & sediment reduction goals; application of N/P BMP Tool; review of HSPF & 2 nd wave of scenarios	County, city, & SWCD staff; elected officials; state agency staff; urban & rural residents; landowners; lakeshore residents; farmers; ZWP Board members; commodity group representatives; The Nature Conservancy
August 24, 2016	Cover Crop & Strip Till Demo Day: ZRW farmer-led tour of effective agricultural conservation practices and challenges. The ZWP had an informational ZWR WRAPS booth at this event.	Farmers; landowners; urban and rural residents; county & SWCD staff; commodity group representatives
September 7 th , 2016	Applications of the N/P BMP Tool Meeting – Wabasha County	ZWP and MPCA staff met with SWCD & county staff
September 8 th , 2016	Applications of the N/P BMP Tool Meeting – Dodge County	ZWP and MPCA staff met with SWCD & county staff
September 14, 2016	Applications of the N/P BMP Tool Meeting – Goodhue County	ZWP and MPCA staff met with SWCD & county staff
September 15, 2016	Applications of the N/P BMP Tool Meeting – Olmsted County	ZWP and MPCA staff met with SWCD & county staff
November 15 th & 16 th , 2016	3 rd Round Lobe Meeting: Protection strategies – fulling supporting waters, drinking water, MN DNR protection efforts; Review of N/P BMP Tool summary tables and revised Zonation Priority Area Maps from meetings with counties	County, city, & SWCD staff; elected officials; state agency staff; urban & rural residents; landowners; lakeshore residents; farmers; ZWP Board members; commodity group representatives; The Nature Conservancy
December 14 th , 2016	Meeting with City of Rochester (MS4): Discussion of WRAPS applications to an MS4, Zonation, and BMP Tools.	City of Rochester stormwater staff & MPCA staff
January 28 th , 2017	ZRW WRAPS Finale Meeting: A review and discussion of draft sections of the ZRW WRAPS document and solicited feedback	County, city, & SWCD staff; elected officials; state agency staff; urban & rural residents; landowners; lakeshore

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	on the entire process.	residents; farmers; ZWP Board members; commodity group representatives; The Nature Conservancy
February 9, 2017	ZWP's Water Ways Speaker Series: BWSR 1W1P coordinator, Julie Westerlund, spoke about the 1W1P planning efforts and how it relates to the WRAPS.	Urban and rural residents; farmers; academics; ZWP members and staff; county, city, and SWCD staff; elected officials; lakeshore residents

Findings from Outreach & Engagement Efforts

While ZRW WRAPS outreach and engagement occurred in many avenues, the lobe and subsequent county meetings afforded the most feedback. Participants offered both verbal and written input and perspectives that greatly informed this document. Contributions dissected the effectiveness of strategies, tools, and modeling presented at lobe meetings. The high level of participation was critical, and has manifested into a highly tailored and effective WRAPS document.

A period of public comment on the draft WRAPS report will be offered from _____ to _____ 2017. Public notice of the comment period will be published in the State Register.