
Appendix B

Summary of Stakeholder Engagement Activities



Greater Zumbro River Watershed

Comprehensive Watershed Management Plan

Waterside Chats Summary

Summary

The Greater Zumbro River Watershed Partnership hosted “Waterside Chats” in three communities throughout the watershed in October and November 2019. Waterside Chats were held on October 24th, 2019 at the Zumbro Valley Recreation Club in Mantorville, November 7th, 2019 at the Community Center in Mazeppa and November 14th, 2019 at the Sportsman’s Club in Lake City.



The public was asked to attend the Waterside Chats to learn about the issues that had been identified by local partners and to provide feedback with their local knowledge of the watershed. Each Waterside Chat began with an overview presentation by the local SWCD or County Staff which included a summary of the One Watershed, One Plan program and plan development process, a summary of what has been accomplished, and information on how the public can participate. Following the overview, Barr Engineering summarized the priority resources and issues that had been identified in local and state plans, studies, reports, state agency feedback, and resident surveys. Initial results of the prioritization of these issues identified by a survey of watershed residents and ranked by the policy committee, planning workgroup and technical advisory group was also shared to aid in the table conversations (see figure 1 below).

Following the presentation, attendees were broken into small groups. Each small group discussed a series of questions to provide their input and feedback on the list of priority issues to be addressed in the 10-year scope of the plan. Comments were captured by a facilitator from the planning partnership, summarized, and reported out to the large group.

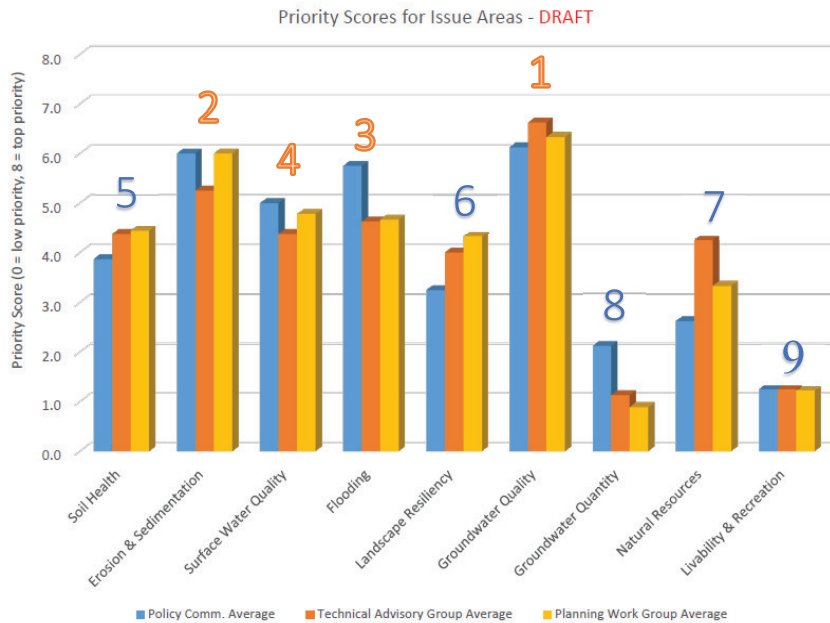


Figure 1. Priority Scores for Issue Areas (Policy Committee, Technical Advisory Group, and Planning Workgroup Ranking)

Waterside Chats Framework & Participants:

The three Waterside Chats were hosted in late October and early November of 2019. The first was held on October 24th in Mantorville, the second on November 7th in Mazeppa, and the third on November 14th in Lake City. The Chats were facilitated by the local County or SWCD staff expert in each area. The Waterside Chat in Mantorville included 12 participants, and 10 staff from the planning Work Group and the consultant team. The 12 participants represented an assortment of local citizens and representatives from local and state government entities. The November 7th Chat in Mazeppa included 29 participants, and 10 staff from the Planning Work Group and consultant team. The composition of participants was diverse and included many local landowners and producers from the area. Other participants were affiliated with the Lake Zumbro Water Quality Committee, state agencies (MPCA, MDNR), and environmental advocacy



Photo: Waterside Chat in Mazeppa, MN

groups (Conservation Minnesota). The third chat on November 14th in Lake City included 23 participants, and 8 staff from the planning workgroup and consultant team. Participants included many citizens who live in the Mississippi River – Lake Pepin watershed area, state agency staff from MDNR and MPCA, the City of Lake City Environmental Committee, local SWCD supervisors, and The Nature Conservancy.

Emerging Themes:

The questions that were asked during the small group table conversations are presented below with a summary of the general themes. A full list of comments captured at the table conversations is included as an attachment to this summary.

Question 1. What do you think are the *major issues* in the watershed? Do you agree with the survey results and partnership prioritization?

Many of the participants strongly agreed with the issue prioritization ranked by the Policy Committee, Planning Workgroup and Technical Advisory Group. They felt that the issues which were ranked with the highest priority (Groundwater Quality, Erosion and Sedimentation, Flooding and Surface Water Quality) closely aligned with results from the resident survey and addresses the major issues in the watershed.

Attendees also discussed that many implementation actions to address the top priorities will have multiple benefits. For example, promoting soil health practices will address multiple issues such as surface water and groundwater quality. Addressing the top ranked issues first will also have beneficial impacts for some of the lower ranked priorities like “recreation and livability”.

Question 2. What specific resources or areas are you concerned about?

Participants were asked to talk about specific areas of the watershed that they were concerned about. Many participants discussed specific areas that are prone to flooding with focus on areas that have erosion and sedimentation problems. Some examples of areas participants were concerned about in the *Zumbro River Watershed* included Middle Fork Zumbro River, Mayowood



Photo: Waterside Chat in Lake City, MN

area (Minnesota State Highway 63 and 52), the Lower Zumbro Watershed, and Lake Zumbro. Areas that were mentioned in the *Mississippi River-Lake Pepin Watershed* included Wells Creek, Gilbert Creek, West Indian creek and Hay Creek. Figure 2 includes the major subwatersheds in the planning area.

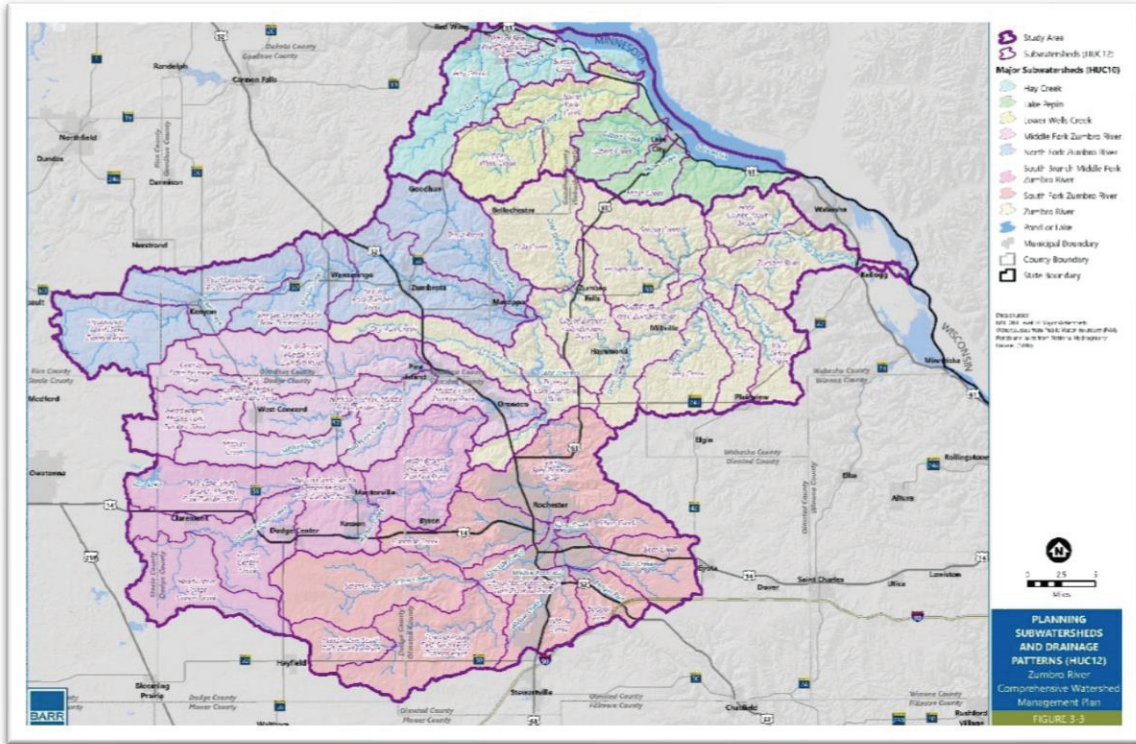


Figure 2. Planning Area Major Subwatersheds

Another focus of conversation across all three Waterside Chats was Groundwater Quality. Participants were concerned about specific areas with documented contamination issues, especially high nitrate levels as identified in the MN Department of Agriculture’s Township Testing Program (ex. Florence Township, Goodhue County). Groundwater quality was a concern for private drinking water supplies and wellhead protection areas for municipal supplies. Lastly, participants discussed protection of recharge areas and wetlands.

Question 3. Within the broad issue categories, what specific problems are most important?

Participants were asked to discuss the specific problems that are most important within each broad issue category. The following summarizes major themes emerging from the Waterside Chat small group discussions:

Groundwater Quality

Participants felt that groundwater quality and groundwater protection is a major issue and should be a top priority as watershed residents rely on groundwater for their drinking water (Figure 3). The following bullets summarize comments related to Groundwater quality:

- Groundwater quality (drinking water quality) is threatened by contaminants like nitrate and bacteria as evidenced by the recent Township Testing Program monitoring results.
- Issues like unsealed wells and sinkholes continue to contribute to the contamination problem.
- There is concern about using lower aquifers for drinking water as they have other contaminants of concern.
- Desire for more public education and engagement to better inform the public regarding water quality issues.

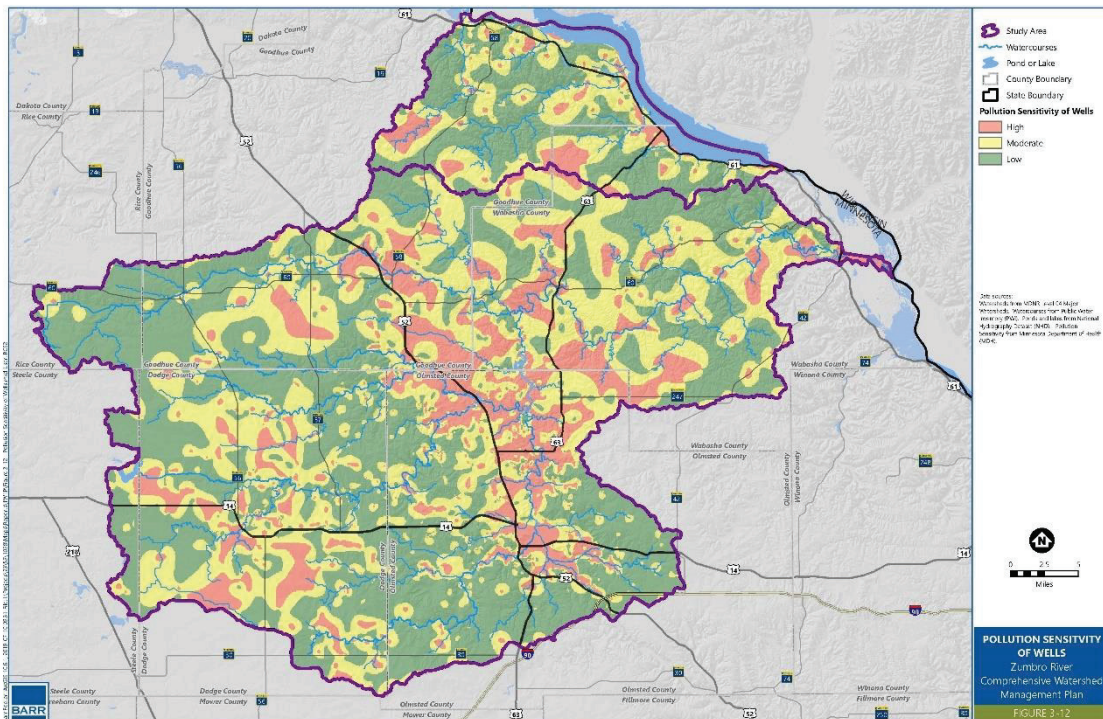


Figure 3. Pollution Sensitivity of Wells; Red (high sensitivity to pollution) Green (low sensitivity to pollution)

Conservation Practices & Soil Health

Conversations emphasized that loss of conservation practices have led to altered hydrology, altered landscapes, and altered habitat. Examples provided by participants included:

- Increased tillage is increasing sedimentation and leading to poor soil health in many areas.
- Waterways and contour strips are being removed and tiling has increased across the watershed.
- Poor fertilizer management is contributing nutrient loading from feedlots and agricultural land
- There is a lack of perennial vegetation; including increased tillage along fence lines and buffer strips.
- It is difficult to raise awareness of soil health practices and to find landowners willing to adopt the practices.

Some participants felt that the issue stems from our current agricultural system of incentivizing the production of corn and soybeans. Farms are converting from livestock operations to more cropland which means less diversified crops and less pasture/hay in rotation.

Discussions included suggestions to enforce existing standards and/or appropriate land use management to limit non-point source pollution like nutrients and sediment.

Flooding & Landscape Resiliency

A reoccurring discussion at the Waterside Chats included concern about the increased frequency of precipitation events and climate change contributing to high volumes of runoff, more frequent flooding, fast flows, and streambank erosion in many areas of the watershed. These issues are summarized below:

- Flooding is exacerbated by altered hydrology, such as loss of wetlands and water storage.
- Flooding leads to bank erosion, increases sedimentation, impacts water quality and creates public health issues throughout the watershed.
- Public infrastructure, transportation, agricultural land, and economies located in the floodplain are negatively impacted.
- More water storage is needed as wetlands have been impacted throughout the watershed.
- There is some disagreement over where and how to store water, for example where impoundments and dams should be restored versus where they should be recommended for removal (ie. Silver Lake Dam in Rochester MN).

Degraded Surface Water Quality

Participants discussed surface water quality impacts from both rural and urban sectors including the following:

- Surface water (and groundwater) are being polluted as municipal wastewater systems face aging infrastructure and capacity problems.
- Small community and private septic systems are failing and contributing to pollution downstream.
- Pollutants like road salt and urban trash in stormwater discharge impact our surface and groundwater quality.
- Nutrient loading from feedlots and agricultural land is degrading water quality (Ex. Figure 4).

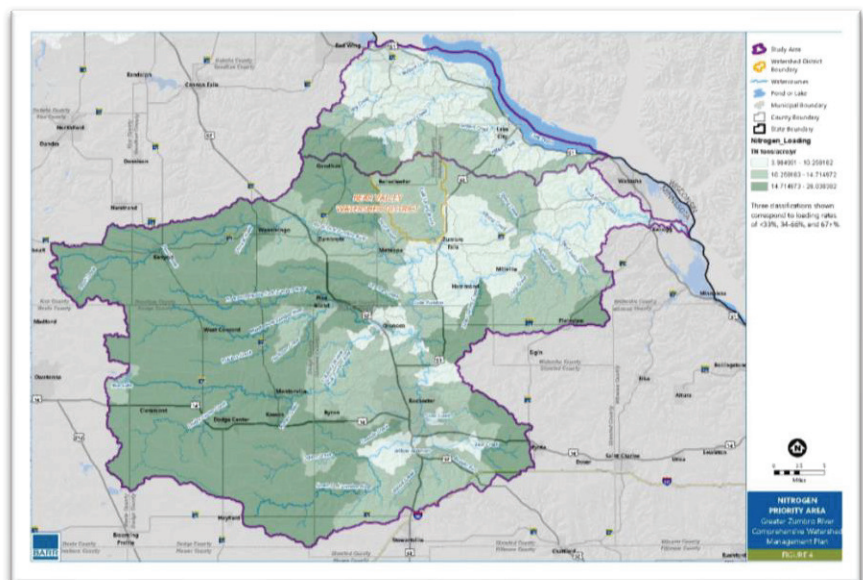


Figure 4 Total Nitrogen Loading in the Greater Zumbro River Watershed

Natural Resources

Forest health including terrestrial invasive species and brush/tree overgrowth along stream banks is an issue in the watershed and should be addressed in the plan.

Altered hydrology and lack of perennial vegetation may negatively impact habitat and health of fisheries.

Erosion & Sedimentation

Erosion and sedimentation contribute to nitrogen movement and affect our streams and lakes (Lake Zumbro & Lake Pepin).

Producers face many challenges including the cost of adopting beneficial soil health practices (ex. cover crop seed) which will keep soil on agricultural land and reduce erosion/sedimentation. There was agreement that requirements, such as buffers are effective but are a constant challenge for some landowners facing increased streambank erosion due to flooding.

Livability & Recreation

Waste left at campgrounds, overuse of trails, urban trash, and contaminated stormwater impacts the recreational quality of the resource.

Methods to Improve Water Quality

Some attendees voiced concern that voluntary conservation programs do not always work, and that regulation is needed in certain scenarios. There was also concern that lack of regulation or inefficient regulation have resulted in marginal or no water quality improvements over time, and stakeholders including state agencies, public and private sectors often lack joint coordination and have differing opinions on priorities.

Question 4. What solutions do you see to these problems?

Participants were asked to discuss actions that will make the biggest impact on water quality issues in the watershed. Below are general themes that emerged from the small group conversations.

Conservation Practices & Soil Health

Promote regenerative soil health practices and adoption of other agricultural/conservation BMPs, as they will impact many of the issues and problems the watershed faces. Some of the actions that should be promoted include:

- Promote cover crop adoption
- Increase peer to peer farmer education on soil loss and reduced tillage (or no till) farming practices.
- Keep the soil where it is and limit erosion and sedimentation



Photo: Cover Crops Planted on Olmsted SWCD's Soil Health Farm

- Improve nutrient management; fertilizer rate and timing
- Promote managed grazing, use of saturated buffers, and smart tiling
- Increase BMP education and instruction for renters
- Target commercial/co-op agronomists
- Lobby for large scale change to the farm bill

Education and Promotion

Participants discussed ways to increase and promote education around water quality issues through the following methods:

- Increase education in K-12 schools (ecology curriculum)
- Increase coverage on local news outlets to increase concern and provide for a more informed public
- Enhance outreach on groundwater contamination issues
- Adopt short term goals and deliverables in the Plan to demonstrate that practices are working. Share successes and failures with stakeholders
- Share and educate on the responsibilities that lie with both rural and urban communities.



Photo: Soil Health Field Day in SE MN to Promote Education

Incentivize Best Management Practices

Participants felt that landowners who are adopting best management practices should be incentivized. They also suggested methods for reaching more landowners and continued programmatic support.

- Provide better cost sharing for some practices (planting cover crops, renting/buying specialized equipment, trapping sediment, and structural BMPs)
- Offer subsidies to protect soils productivity
- Incentivize stewardship and tools. Promote neighboring farmers working together (sharing equipment and resources)
- Establish contracts with renters/absentee landowners that establish BMPs for nitrogen management
- Expand reinvest MN program (RIM) and CREP/CRP
- Support tax relief

- Make it easy, limit the red tape

Landscape Resiliency

Promote forest health practices; plant more trees with climate change in mind.

Water Storage, Floodplain Retention, Slowing the Flow, & Streambank Restoration

Solutions should focus on adding water storage capacity, tile management, floodplain retention, restoring wetlands and slowing the flow. Participants encouraged using water control structures and practices where they will make the biggest impact on water storage and habitat reconnection and included the following recommendations:

- Focus on managing failing structures
- Implement new terraces, basins, and grade stabilizations throughout the watershed
- Utilize dams and the transportation network for water storage where possible (floodplain culverts etc.)
- Promote perennial cover/prairie, CRP adoption on marginal lands. Reconnect wildlife corridors for habitat

Improve Water Quality

Focus on stabilizing and restoring streambanks by increasing vegetation/buffers along streams and waterways.

Implement urban Stormwater Best Management Practices (even in communities without MS4 permits). Maintain natural areas, reduce impervious surfaces, utilize raingardens, and reduce salt use.

Voluntary vs Regulatory

Participants also discussed voluntary measures versus regulatory action. Some felt that non-compliance in problem areas should have consequences such as enforcement action, and that political willpower is needed to address these issues. Other participants discussed increasing staff resources and expanding beyond the regular toolbox of state and federal programs to address water quality issues in the Greater Zumbro River Watershed.



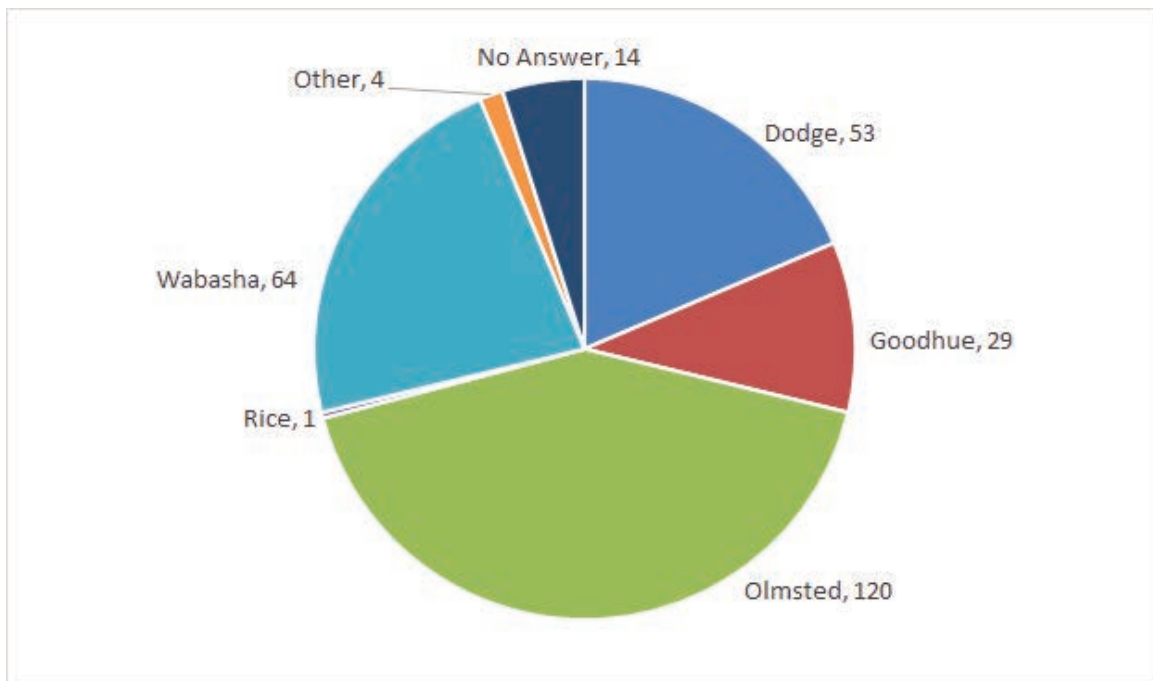
Photo: Zumbro River Downstream of the Green Bridge

Memorandum

To: Greater Zumbro Watershed Partnership Planning Work Group
From: Greg Williams, PE, Barr Engineering Co.
Subject: Results of the Greater Zumbro One Watershed, One Plan public engagement survey
Date: October 22, 2019
Project: 23551058.00
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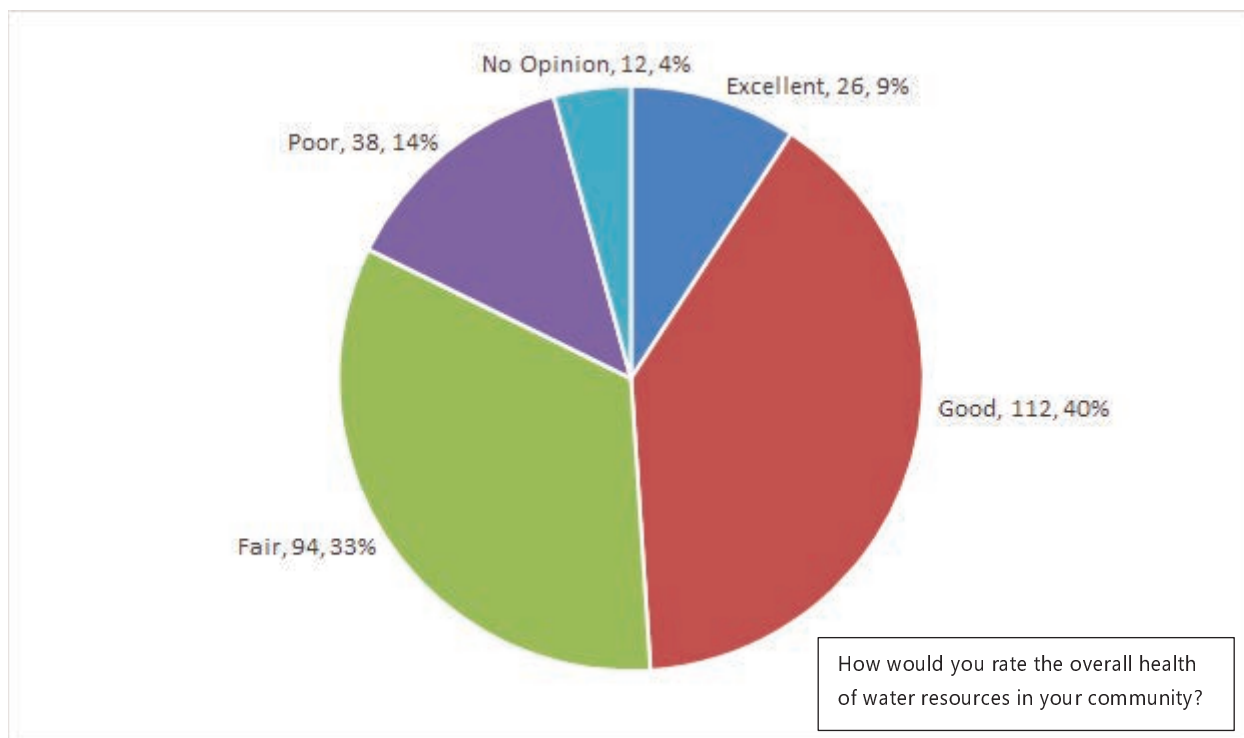
As part of an extensive stakeholder engagement effort, the Greater Zumbro Watershed Partnership Planning Work Group (PWG) developed a brief survey to characterize public opinions regarding natural resource management in the planning area. The survey was made available at the project public kickoff meeting hosted in Rochester on June 20, 2019, county fairs, online via the project webpage, and mailed to approximately 900 residents in the planning area. Through September 20, 2019 a total of 285 surveys had been completed. This memorandum summarizes the results of the surveys submitted through September 20, 2019.

Question 1 – What is your County of residence?



Dodge, Goodhue, Olmsted, and Wabasha Counties are well represented within the survey responses. About 5% of respondents did not answer the question, and 4 respondents (1.4%) identified another county outside the planning area (i.e., Dakota, Houston, Mower, or Pepin, WI). Responses to question 1 suggest the survey responses are largely representative of planning area.

Question 2 – How would you rate the overall health of water resources in your community?



Approximately 50% of survey respondents consider the health of water resources in their communities as “good” or “excellent.” Only 38 respondents (14%) identified the health of water resources as poor. These results suggest that stakeholders may encourage the emphasis of protection strategies in the Plan implementation program.

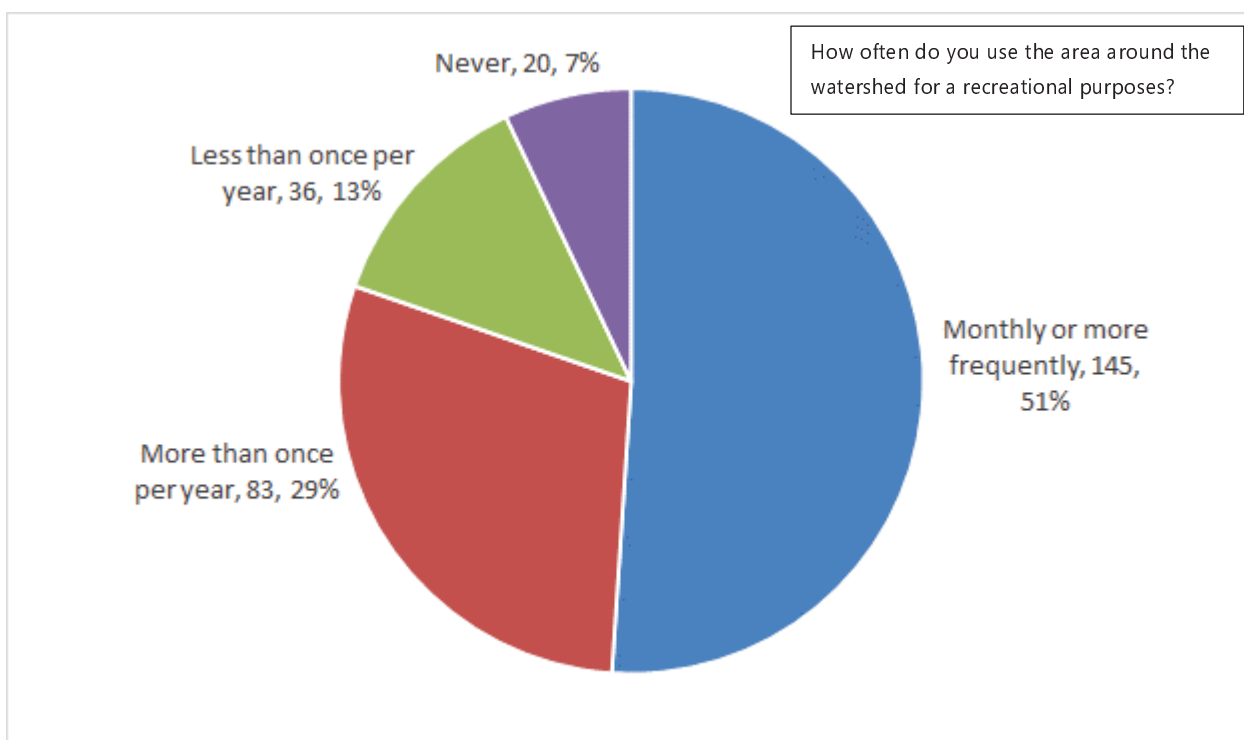
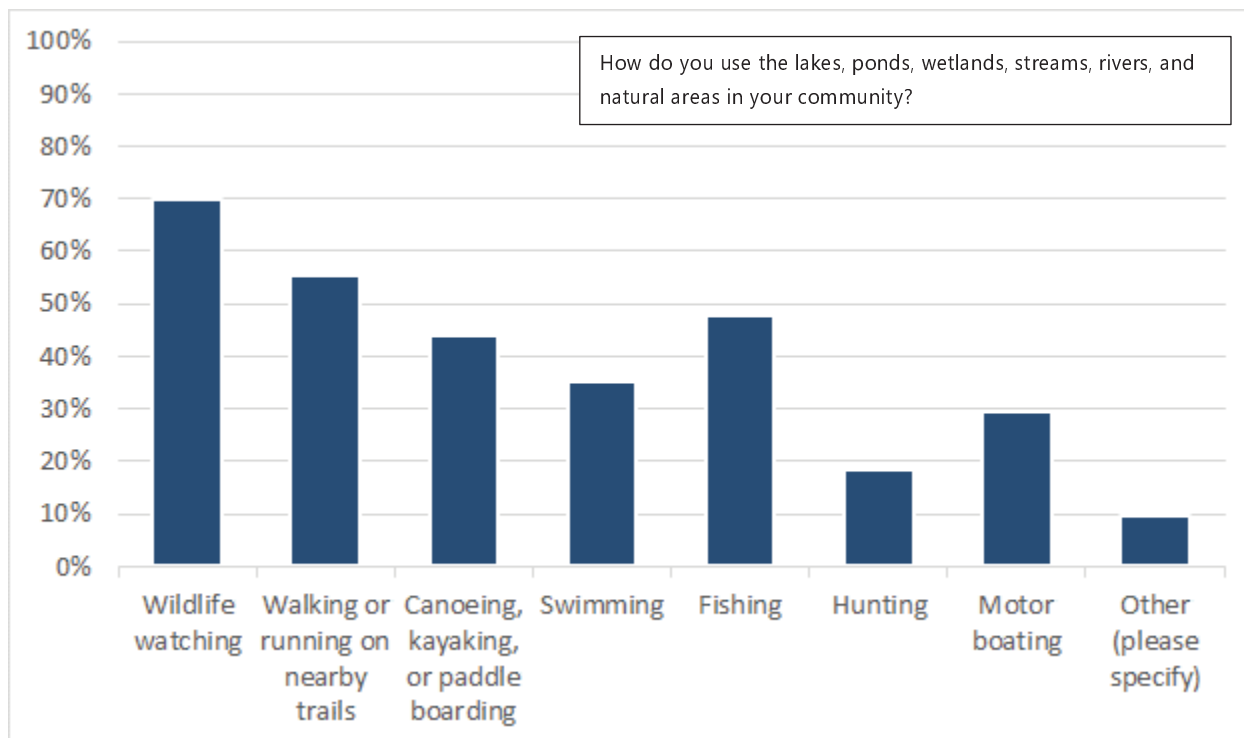
Question 3 – How do you use the lakes, ponds, wetlands, streams, rivers, and natural areas in your community?

Question 4 – How often do you use the area around the Zumbro Watershed and/or Mississippi River Lake Pepin Watershed for a recreational purpose?

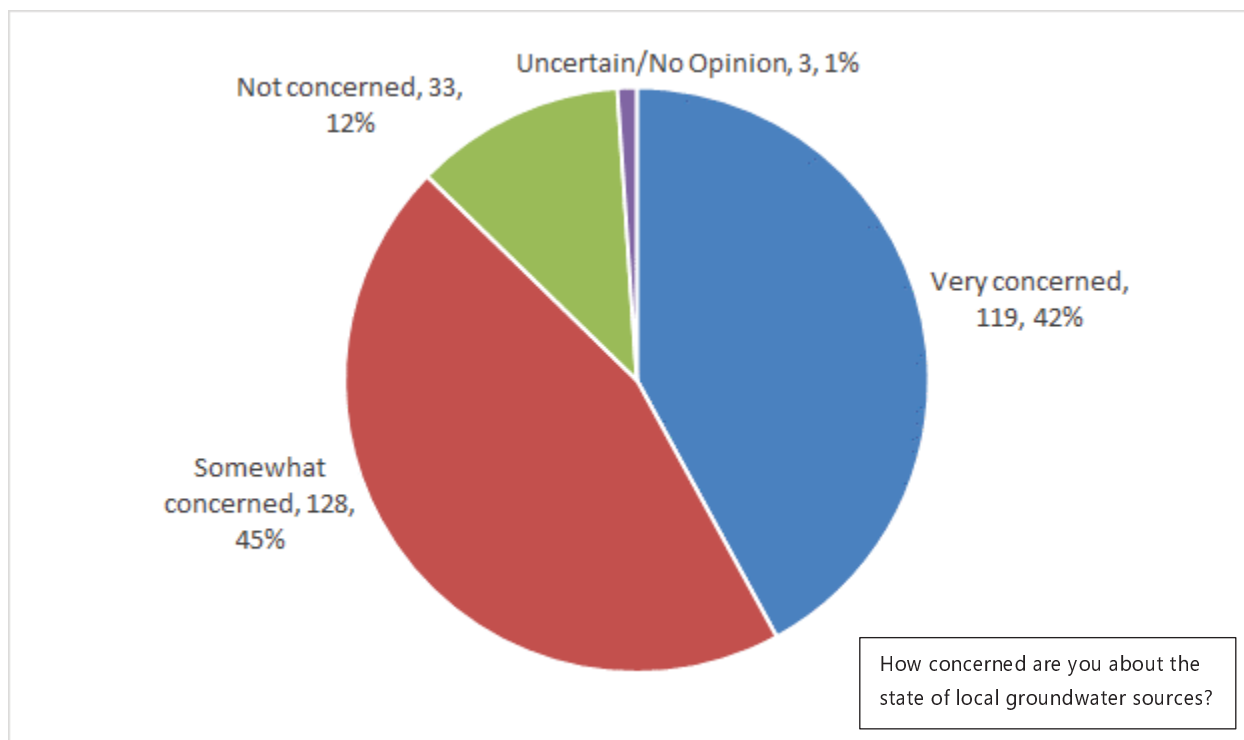
Questions 3 and 4 are related to public use of the water and natural resources within the planning area. Responses to question 3 indicate that residents use the water resources and natural areas in the planning area for a range of activities. Wildlife watching (70% of respondents) and nearby walking or running (55% of respondents) were the most popular. Over 30% of respondents use water resources for swimming. Other uses identified by respondents included:

- Biking
- Education
- Photography
- Snowmobiling

Responses to question 4 indicate frequent (monthly or greater) recreational use of resources in the planning area by approximately half of survey respondents. Few survey respondents (7%) indicated that they never use the watershed for recreation.



**Question 5 – Drinking water within the watershed comes from groundwater sources.
How concerned are you about the state of local groundwater sources?**



Groundwater supplies drinking water for the entire planning area. Nearly 90% of survey respondents expressed concern over the state of drinking water in the watershed. Only three survey respondents (1%) indicated they are uncertain or have no opinion; however, information from the Minnesota Department of Health (MDH) suggests that many residents lack water quality information for their wells. This suggests there may be gap in public awareness of groundwater quality issues.

Question 6 – How Important are each of the following water issues to you?

Question 6 asked respondents to select how important each of twelve water and natural resource management issues are from the following choices:

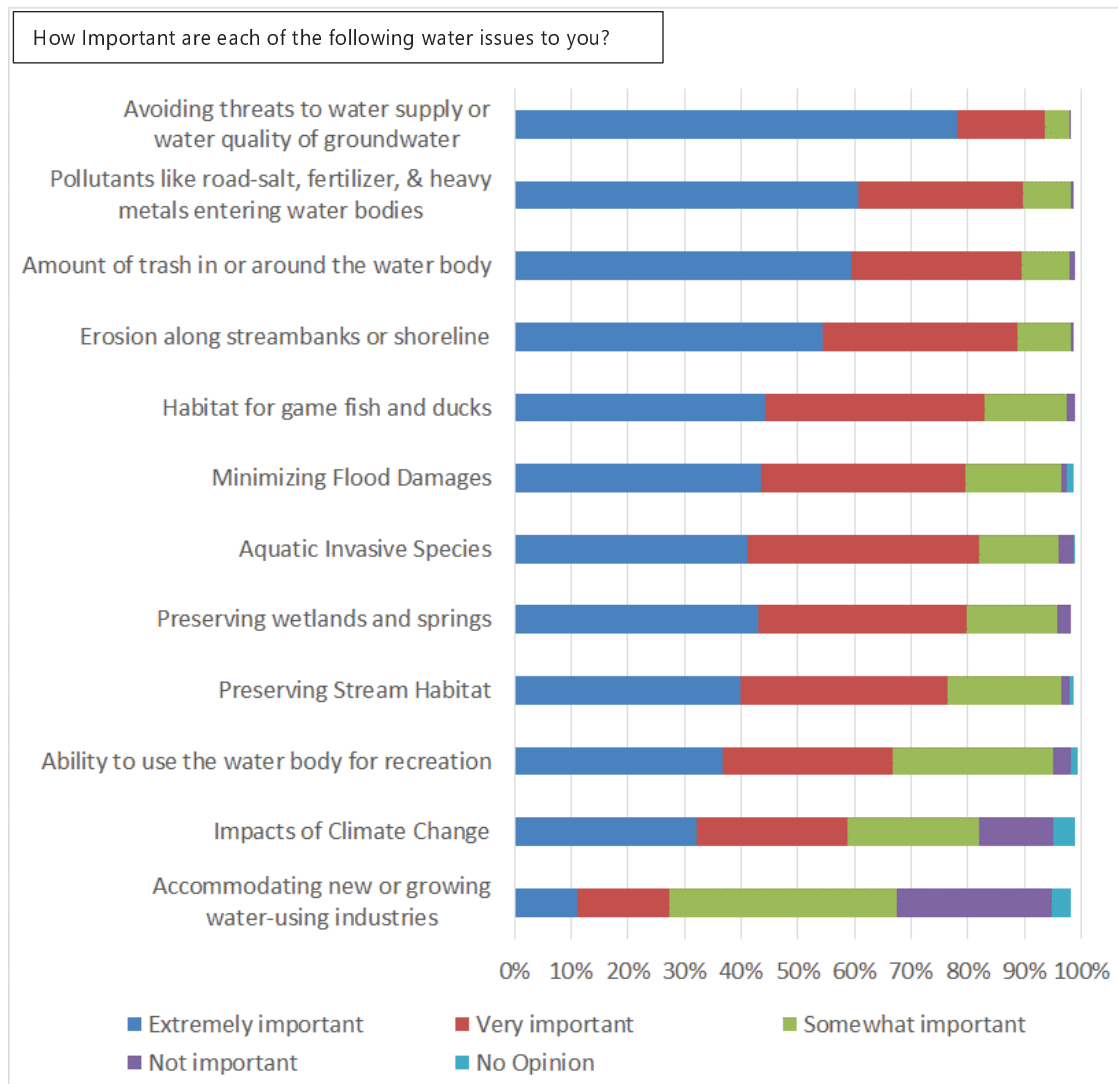
- Extremely important
- Very important
- Somewhat important
- Not important
- No opinion

Survey responses suggest that residents consider *all* of the pre-identified watershed issues to be at least “somewhat important,” although some register as more important than others (see responses to question 7). Of the twelve pre-identified issues, only two were identified as “not important” by more than 10% of survey responses, including:

- Impacts of climate change (“not important” to 13% of survey respondents)
- Accommodating new or growing water-using industries (“not important” to 27% of survey respondents)

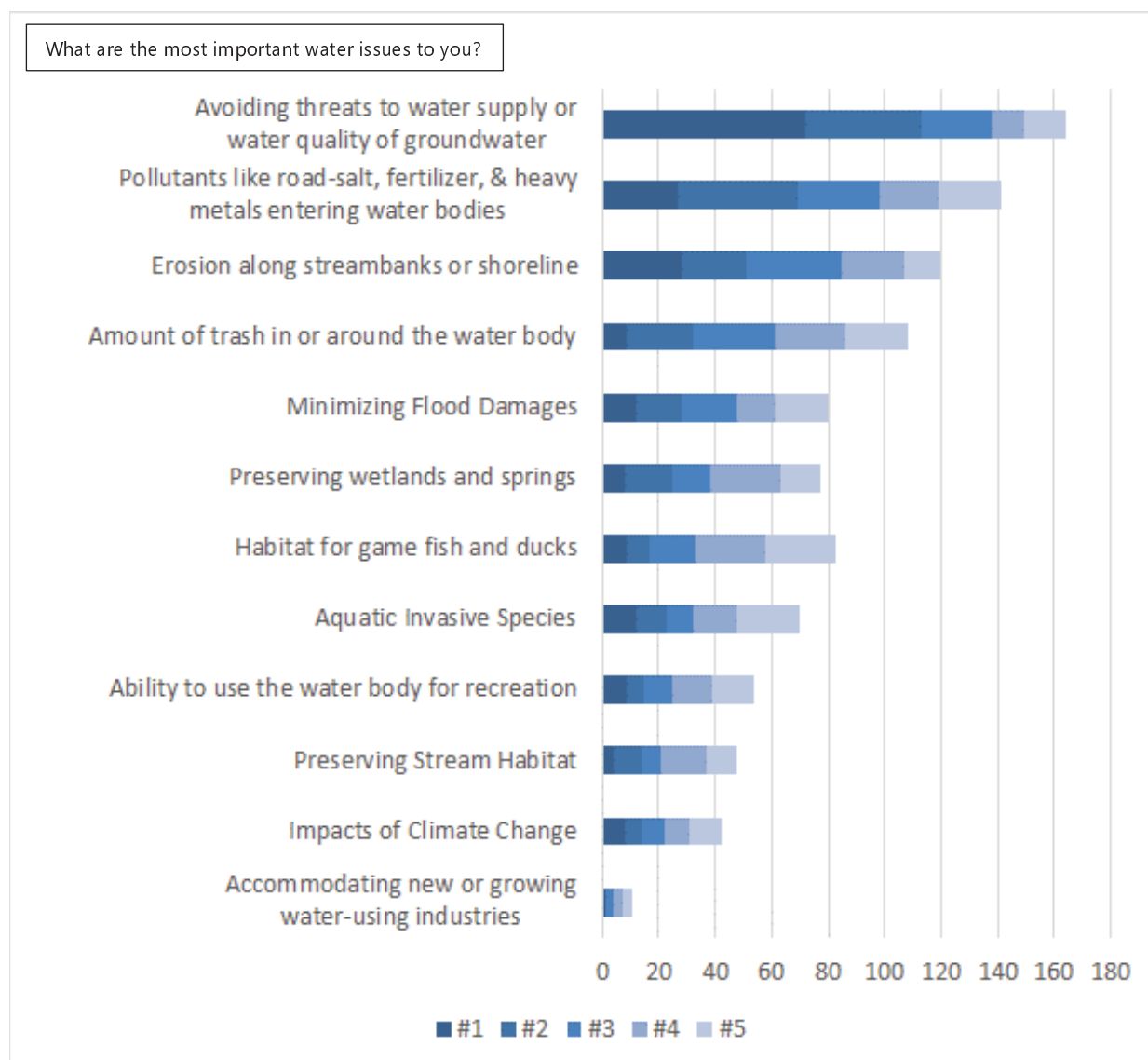
Thirteen survey respondents (5%) specified other issues as important in an open-ended response. All of the open-ended responses are related to, variations of, or specific examples of the pre-identified watershed issues identified in the question. Selected open-ended responses (paraphrased) include:

- Too much drain tile causing reducing soil capacity to hold water and causing flooding
- Controlling and reducing leakage/pollution from large contained animal feeding operations (CAFOs)
- Increasing access to new waters for recreation
- Public understanding of the benefits of regenerative soil management/soil health
- Animals pastured with/standing in water resources impacting water quality



Question 7 – What are the most important water issues to you?

Question 7 asked survey respondents to identify their top 5 water issues from those listed in question 6 ranked in order of importance. Responses to question 7 generally corroborate the responses to question 6. “Avoiding threats to water supply or water quality of groundwater” was selected as the most important issue more than twice as frequently (72 times) as any other issue. Conversely, the “Amount of trash in or around the water body” was identified as an important issue, but received very few “#1” votes.



Question 8 – Are there specific waterbodies or natural areas you are concerned about?

One hundred twenty five survey respondents (57% of those answering question 8) answered “Yes” to question 8. Specific waterbodies of concern referenced most frequently in the open-ended responses to question 8 include:

- Lake Zumbro (44 responses)
- Zumbro River (37 responses) including references to:
 - North Fork Zumbro River (5 responses)
 - North Branch Middle Fork Zumbro River (1 response)
 - Middle Fork Zumbro River (5 responses)
 - South Fork Zumbro River (4 responses)
- Mississippi River (11 responses)
- Lake Pepin (9 responses)
- Groundwater sources (5 response)
- Salem Creek (4 responses)
- Bear Creek (3 responses)
- Masten Creek (2 responses)
- Smaller tributaries (2 responses)
- Trout streams (2 responses)

Other specific waterbodies identified once among the open ended responses include: Cascade Creek, Dodge Center Creek, Foster-Arend Lake, Mayowood Lake, Silver Spring Creek.

Question 9 – General Comments/Suggestions

Question 9 provided an opportunity for survey respondents to submit general comments and/or suggestions in an open-ended response. Fifty-seven survey respondents (20%) completed question 9. Responses to question 9 address a wide range of issues. Some common themes include:

- Emphasis on soil health practices to achieve direct (i.e., in-field) and downstream benefits (e.g., improved water quality, reduced flooding)
- Frequent flooding in the watershed (exacerbated by altered hydrology) leads to erosion, water quality, and public health issues
- The importance of groundwater quality and groundwater protection
- A desire for more public education and engagement regarding water quality issues
- The need for enforcement of existing standards and/or appropriate land use management to limit non-point source pollution (nutrients and sediment)

Conclusions

The responses to the survey indicate strong public interest in the quality and management of water and natural resources in the planning area. Results identify several issues of importance, but generally identify groundwater quality, pollutant loading, erosion, and flooding as top priorities.