



A program led by



In partnership with

MCWD NEMO Workshop – July 2010 Program and Evaluation Summary



MINNEHAHA CREEK
WATERSHED DISTRICT



Date: July 14, 2010

Program: Shorelines & Stormwater
Addressing Impaired Waters and Protecting our Lakes and
Creeks

Objectives: Provide an opportunity for local elected and appointed officials and community leaders to:

1. Increase their knowledge about how stormwater runoff impacts lakes and creeks and the critical role local cities and towns have in minimizing the impact from stormwater, with specific attention on impervious surfaces.
2. Increase their knowledge about shoreland issues such as vegetation management, bank stabilization, littoral zone management, and the tools available to local governments to assist them in improving shoreline health and ultimately, the health of the lake.
3. Build their toolbox of plans, practices, and policies that they can adopt, implement, and require in their roles to decrease impacts on lakes and creeks.
4. Build recognition of projects, programs, and services MCWD can provide to communities and to encourage them that the MCWD can be their first resource for assistance for shoreline and stormwater management.

Participation: 80 local elected & appointed leaders plus 16 additional staff members.

Venue: NEMO on-the-water workshop, Queen of Excelsior, Lake Minnetonka

Communities participating: Representatives from more than 18 cities, 2 counties, several watershed boards, and 3 nonprofit organizations, plus limited staff from local, regional, and state agencies.

Presenters: John Bilotta, Julie Westerlund (Leads) with assistance from staff from MCWD, DNR, MPCA, and local NEMO Partner Watershed Game Facilitators.

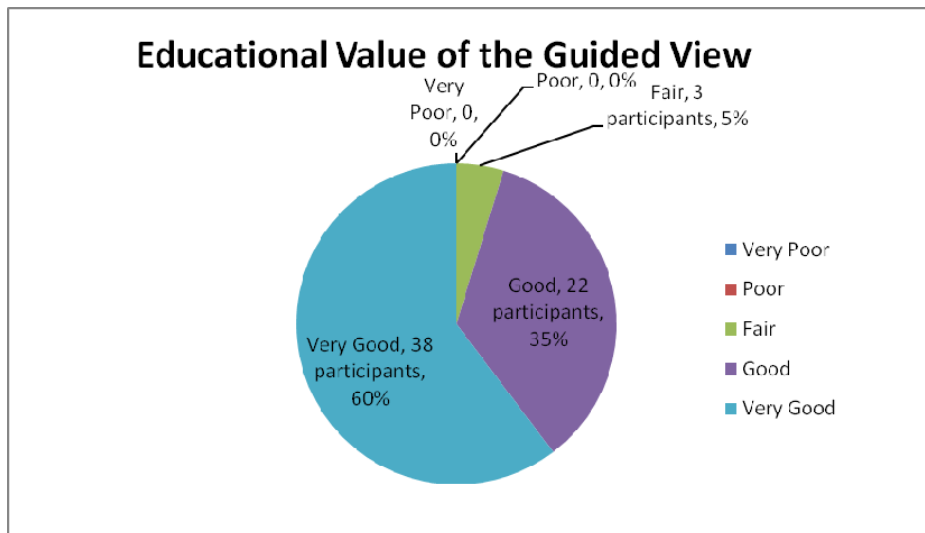
* For specific components of the program, contact John Bilotta or Julie Westerlund

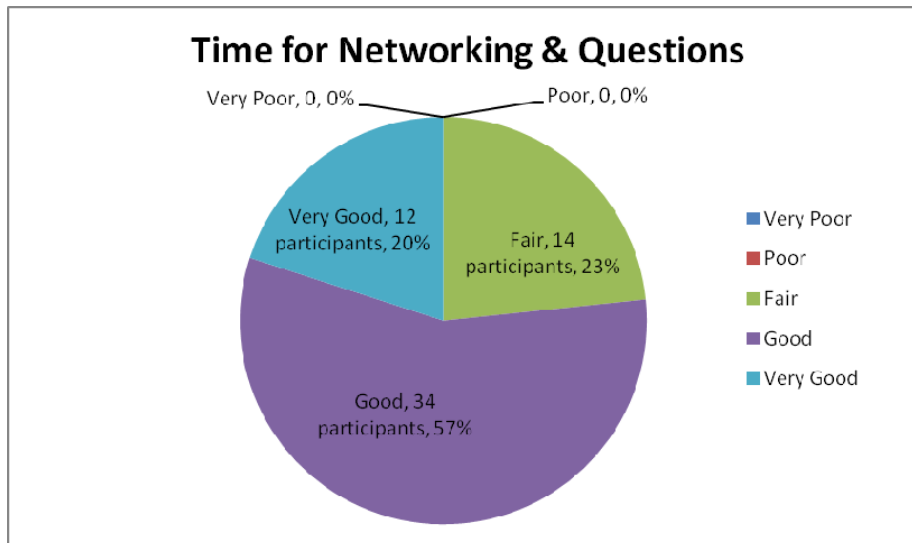
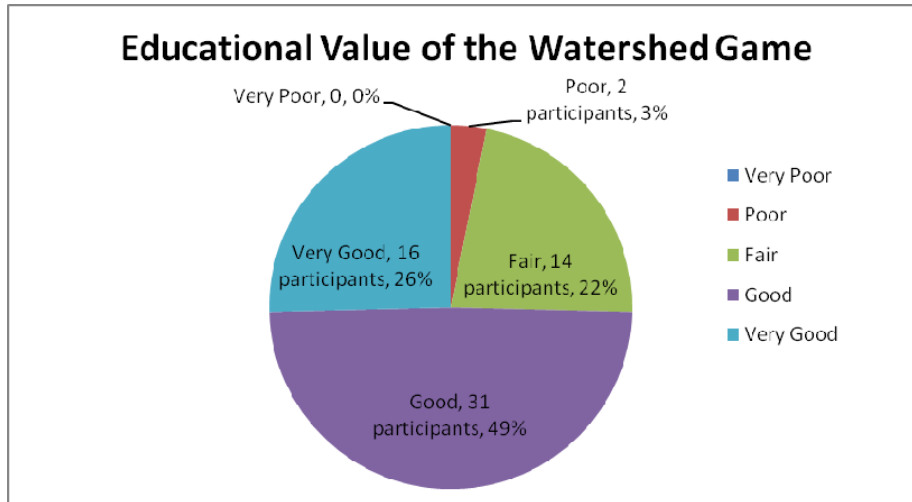
Evaluation Summary

- ✚ **95% of the participants found good to very good educational value in the Guided View component.** The Guided View consisted of 6 specific learning stations. A complete copy of the Guided View is available online at <http://www.minnehahacreek.org/NEMO.php>
- ✚ **75% of the participants found good to very good education value in the Watershed Game component.** The Lake Version of the Watershed Game was featured. More information can be found at <http://northlandnemo.org/watershedgame.html>.
- ✚ **100% of the participants valued the time for networking – 20% valued it very highly, 57# highly, and 23% fair.**

Knowledge Gained

- ✦ **42% of the participants indicated they increased their level of knowledge about the impact of stormwater runoff to lakes and rivers from impervious surfaces in communities.** 40% also indicated their level of knowledge did not change.
- ✦ **61% of the participants indicated they did increase their level of knowledge about the differences in local municipal zoning in the shoreland zone.** 36% indicated their level of knowledge did not change.
- ✦ **56% of the participants increased their level of knowledge of the characteristics and benefits of natural shorelines.** 41% indicated their level of knowledge did not change.
- ✦ **Impact of altered shorelines is where the program excelled at showing improvement in participant knowledge.**
 - **21% indicated their level of knowledge grew by 2 or more levels to very good.**
 - **46% indicated their level of knowledge grew.**
 - Only 30% indicated their level of knowledge did not change.
- ✦ **52% of the participants indicated they increased their level of knowledge of water quality, impaired waters, and needed pollutant load reductions.** 44% indicated their level of knowledge did not change.





Participants were asked to identify two new concepts they learned during the program. Some of the most frequent and prominent* included the following:

- ✚ MCWD shoreline restoration projects, especially on Big Island (18 respondents)
- ✚ The difference in zoning regulations on the lake and among cities (i.e. Tonka Bay vs. Orono)(13 respondents)
- ✚ Rip rap & altered shorelines – many participants wrote something related to learning more about the amount, the impact from, the affects of rip rap.
- ✚ Phosphorus – many participants indicated they learned new knowledge about phosphorus pollution impacts to the Lake and to water quality, sources of.
- ✚ “I started thinking about runoff differently –more where the water is flowing.”
- ✚ “The District has goals to meet and municipalities are suppose to stand up and help out to a specific degree”

* All of the responses to this question are found at the end of this document in the raw data.

Participants were asked to provide a specific example of how you they would apply information from this workshop to their work as a local decision maker, elected official, or community leader. Some of the most profound examples* include:

- ✚ It helped me understand the regulations better and why they are in place. I can take the information and explain it better to residents.
- ✚ Study/understand my communities policies on shoreland conservation.
- ✚ Review existing ordinances for possible changes. (4)
- ✚ As variance applications come before a planning commission I can ask applicants additional questions about shoreline conservation and stimulate more discussion awareness with other planning commissioners. (2)
- ✚ I am taking all suggestions from parks and open spaces back to my commission and the director of parks and recreation for my city.
- ✚ Strive for changes in land use ordinances as they pertain to water quality.
- ✚ Go back and share information. Try to get an environmental committee started. (2)
- ✚ I will continue to examine development proposals critically with regard to watershed impacts and inclusion of BMPs- but even more assertively. I will also be meeting with our city staff and colleagues to learn more about our regulations and whether we are doing as best as we can to protect our waterways. Our impervious surface ordinance has been on the back burner for too long- it's time to address it.
- ✚ Look at natural shorelines differently; continue to look for opportunities to partner with MCWD on projects.
- ✚ Better able to consider all the factors involved and their implications
- ✚ I wrote six specific questions from the guide view that I will ask for answers too. This will give me specific application to our community.
- ✚ Review the handout information with the planning committee.
- ✚ Continue to push and provide support to the local jurisdictions to make the hard decisions in implementing and creating water quality improvements.
- ✚ To increase the rigor in urging lake users on all levels that lake Minnetonka can only be preserved when all of us become more respectful to the lake and to transform our behaviors that reflect as such.

** All of the responses to this question are found at the end of this document in the raw data.*

Some of the most prominent comments and suggestions from participant evaluations:

- Thanks for the opportunity to participate. I am reminded of the importance of getting it right the first time. The stakes are high!
- Great event if not to give us final answers but to prime our thinking to get deeper answers and application. Great agenda. Gave us a directory to great sources of knowledge.
- Thank you! Please continue to provide and market these workshops for local officials.
- Data on what contributes most to water quality issues to help prioritize potential projects/ordinance changes.
- Nice idea on a unique workshop venue. Game was good interaction. A (the Guided View) was worth a thousand words.
- The game showed the importance of working together with other government entities.

Raw data from all participants: Identification of two new concepts they learned during the program.

- MCWD shoreline restoration projects, especially on Big Island (18)
- The difference in zoning regulations on the lake and among cities (i.e. Tonka Bay vs. Orono)(13)
- 65% of the shoreline on this lake has rip rap. (7)
- Cities are doing a lot currently with redevelopment.
- Impact of improved shorelines & impervious surfaces (5)
- Impacts of shoreline alterations on water quality, habitats, erosion, etc.. (4)
- 2 (??) phosphorus = 200 lbs of algae (4)
- The value of natural shorelines vs. other stabilization and water quality projects. (3)
- That rip-rap will still be allowed in some cases. (3)
- Criteria for determining water quality/impaired waters (2)
- \$ available for stormwater collection projects. (2)
- Lower lake Minnetonka has good water quality.(2)
- Dead trees in the water are good habitat. (2)
- 7 to 9 times more phosphorus loading on a developed lot vs. a natural or undeveloped lot. (2)
- Rip rap is harmful for turtles. (2)
- We need to work together more
- Examples are the best teacher!
- The contributions of suburban lake lots to runoff, phosphorus, sediment loading.
- Examples should be shown to homeowners who are lake shore owners.
- Alternative methods for phosphorus removal on farms.
- Status of rule making on issues affecting lake use.
- Impaired water measures; rain garden captures 97% rainwater.
- Snow melts in porous parking lots
- Rip rap is eventually covered by bluff slough. (??)
- Everyone doesn't always agree
- People are willing to listen, but will they act?
- Learned more about wide range of impactors
- Pervious Paver etc while good are not a "really good" solution.
- How altered shorelines are restored- that you have to catch them early in order for the restoration to be cost effective.
- Habitat value emphasis
- Soil is loaded with phosphorus from year of application.
- The importance of municipal street sweeping.
- How much phosphorus is in our lake and more about its impact.
- Impacts of shorelines to wildlife.
- Some of the resources available to decision makers
- Partnerships between state and local agencies.
- Salt and calcium effects on the lakes. (??)
- Impacts of Canadian Geese on e-coli/phosphate.
- Proposed new rules for natural buffers.
- There are 4 impaired bays on Minnetonka.
- Considering revised stormwater mgt as rebuilding existing roads.

- Chocolate is a lot easier to spend than real \$\$.
- Integrating rip rap with vegetation.
- Difficulty (politically) in effecting changes.
- I feel good having what I know reinforced- thank you!
- Enjoyed seeing the passion and commitment to change in the presenters and attendees.
- Watershed game was fun!
- I got an idea about how a person that is concerned about an impaired water body can help educate her neighbors, who she says are not informed about water issues.
- I started thinking about runoff differently- more where the water is flowing.
- That the District has goals to meet and municipalities are supposed to stand up and help out to a specific degree.
- Pervious pavement technologies
- How natural shorelines can be incorporated on public land.
- Phosphorus sources.
- From the game- some of the options for improving runoff quality.
- How/where to go for information.

Raw data from all participants: Examples of how they will apply information from this workshop to their work as a local decision maker, elected official, or community leader.

- It helped me understand the regulations better and why they are in place. I can take the information and explain it better to residents.
- We will continue to educate the public, maybe reference MCWD for technical information perhaps FB stormwater/shoreline factoids
- Study/understand my communities policies on shoreland conservation
- Go back and share information. Try to get an environmental committee started. (2)
- I will continue to examine development proposals critically with regard to watershed impacts and inclusion of BMPs- but even more assertively. I will also be meeting with our city staff and colleagues to learn more about our regulations and whether we are doing as best as we can to protect our waterways. Our impervious surface ordinance has been on the back burner for too long- it's time to address it.
- Demand rain gardens, pervious surfaces (for credits), shoreland restorations, stormwater pond improvements.
- Look at natural shorelines differently; continue to look for opportunities to partner with MCWD on projects.
- Better able to consider all the factors involved and their implications
- I wrote six specific questions from the guide view that I will ask for answers too. This will give me specific application to our community.
- Review the handout information with the planning committee.
- Continue to push and provide support to the local jurisdictions to make the hard decisions in implementing and creating water quality improvements.
- To keep consistent codes and encourage buffers and follow-ups.
- To increase the rigor in urging lake users on all levels that lake Minnetonka can only be preserved when all of us become more respectful to the lake and to transform our behaviors that reflect as such.
- Review existing ordinances for possible changes. (4)

- It is all about education and getting individuals to buy-in. We'll utilize the materials to begin basic education to homeowners. We'll work towards increasing the standards through ordinances to go above and beyond DNR standards.
- I am taking all suggestions from parks and open spaces back to my commission and the Director of P & R for my city.
- Strive for changes in land use ordinances as they pertain to water quality.
- I'm the District Manager at a soil & water conservation district. We will be using the watershed game in a couple of weeks.
- Great opportunity to meet other local leaders.
- Recommend that natural and manmade bodies of water be studied for shoreline.
- Recommend onsite stormwater collection at Edina Parks to be need for irrigation.
- Grant applications.
- Have a plan drawn up.
- Encourage use of pervious pavement and rain gardens. (3)
- Work to educate others on benefits of shoreline and stormwater management.
- Try to peruse this more with some of the council to get more of this accomplished. Work with the watershed more closely.
- As a board member of the LMCD, I have a little understanding of this impact of shoreline development and effect on habitat.
- Feel better as others are as confused about phosphorus reduction as I am.
- We (Minnetonka) are already doing most of these things.
- As variance applications come before a Planning Commission can ask applicants additional questions about shoreline conservation and stimulate more discussion awareness with other planning commissioners. (2)
- Try to bring today's knowledge back to the town planning board and city council. They don't listen and like to fill wetlands.
- Any new development must meet standards. Follow Gov. Pawlenty signs new water laws??
- Will report back to our local group on the efforts being made on large lakes -ours is a small lake and has different practices.
- Knowing there are resources for our efforts is very helpful.
- Background information that can be shared with others.
- I will take the knowledge and pay it forward.
- I am a dual commissioner on planning and energy & environment – I would like to work on city wide ordinances.
- Better protect our section of the creek.
- Talk to watershed about shore erosion survey.
- The knowledge of goals and regulations is adequate with city planning but enforcement is the issue.
- Community resident education opportunities are needed.
- Continue to stress importance of water quality to lakes and rivers and to the economy of MN.
- I have met others at this workshop that I will keep contact with!
- Attempting to persuade new development to follow the guidelines.
- Use information in applying zoning laws.
- More knowledge is always helpful in making decisions.
- Revise street standards

- Make reference in our lake newsletter as to need to change way we see lake properties- more natural habitat and not manicured.

All comments and suggestions:

- New lake homeowners should be given educational packets on what their obligations are and ways to help meet them. Lists of groups and agencies to aid them and contact persons with telephone or emails for them.
- Curious if the creeks have different problems than the lakes? I would like more information on the role of the watershed district and how we can continue to work together.
- Add 10 minutes to allow time for questions on the Guided View. You guys did an excellent job. Congrats.
- Very good workshop- I learned a lot and will look at the lake differently. (2)
- This was great! Well done! (6)
- Need to understand how to alter behavior of lakeshore residents to preserve or re-establish natural shoreline. Most do not want natural- they see it as limiting recreation.
- Too noisy on the lower deck for the watershed game, couldn't hear 35% of what the facilitator was saying. Suggest if there is a next time to do this on the top deck or elsewhere.
- Ignorance can no longer be an excuse. I disagree with Mr. Radomski. People do know that what and how they decide to build might have a negative impact on the shoreline. Greater regulation and follow up (enforcement) on the code is imperative.
- Do Minnehaha Creek canoe tour!
- It would be fabulous to be able to ask questions during the "stations" exercises.
- It would be wonderful to see other municipality's ordinances that promote best management practices. More time to exchange information to cut down on reinventing the wheel. More collaboration in the future and sharing of information. More information on impairment situations.
- Too much of the program was focused on the problems – not enough on options/solutions.
- What can be done to engage lakeshore owners to transition toward more responsible shoreline management?
- The acoustics on the boat made it difficult to hear.
- Some of the presenters (staff not guest presenters) on the upper deck came across as very angry towards the audience. It dilutes your message. Also, make use of gray water for municipalities. A lot of our cities are developed and not able to "green" the water ways completely. Gray water for our parks and natural areas is a positive thing and should not be discouraged.
- I will think more about how developments with affect our waters.
- The game was difficult to do with 3 tables. Perhaps 1 game setup with others observing would be more effective on the boat in close quarters.
- Need more information on limited impact development practices and how to mesh them with density requirements and livable community principles of metro council. Also need more information on how to adopt stricter shoreline management. Too many people and too noisy during the watershed game. Need crowd control.
- Enjoyed the evening and visual guide portion with lecturers pointing out multiple facets of lake quality.
- Didn't talk about the impact of boats on the lake.