

Lower Penn Lake  
September 22, 2009  
Open House/Information Meeting  
Summary of Comments Received as of 10/13/09

1. *Can Clean Water Legacy funding be used for any part of this plan?*
  - Maybe. Most Clean Water Legacy (CWL) funding is awarded through an application process and projects must compete with projects from across the State. It is expected that a number of the projects listed in the draft plan would at least be eligible to compete for funding.
  - Projects receiving CWL funding are selected by an inter-agency team that ranks each request based on the following criteria:
    - Relationship to a Total Maximum Daily Load (TMDL) or state-approved local water management plan
    - Measurable results and estimated pollution reduction outcomes
    - Leveraging additional funding
    - Ability to track project effectiveness
    - Readiness to proceed
    - Coordination and cooperation
  
2. *Could there be a fertilizer regulation for properties draining to Lower Penn Lake to minimize excess nutrients from entering the lake?*
  - Regulations restricting the use of fertilizers containing phosphorus already exist. State law, as well as City ordinance, prohibits the use of fertilizers containing phosphorus anywhere in the City. Some exceptions do exist – for example to establish new lawns or in areas where a soil test confirms low levels of phosphorus.
  
3. *What is the sediment delivery to the lake from the watershed?*
  - This information is being provided by the Watershed District.
  
4. *Maintenance of the storm sewer inlets to the lake needs to be increased.*
  - The storm sewer inlets to the lake are inspected and maintained on a regular schedule as part of the City's Storm Water Pollution Prevention Program. Alternative K, if pursued, may improve the long-term function of the storm sewer inlets.
  
5. *Public education should include commercial, retail, and road land uses.*
  - The existing public education program does target commercial, retail, and municipal land owners and operators. Additional public education and identification of critical audiences is expected to be a component of Alternative A.
  
6. *How much does the I-494 lift station impact the volume of water entering Lower Penn?*
  - This information is being provided by the Watershed District.

7. *Could volunteers be used to help maintain the buffer around the lake?*
  - Definitely. Volunteers can be tremendous assets in providing this type of service.
8. *A more current fish inventory is needed.*
  - A fish inventory has been included in the latest draft management plan for 2010.
9. *More water quality information is needed.*
  - The water quality monitoring program currently being performed by volunteers and funded by the Nine Mile Creek Watershed District is recommended to continue as part of the management plan.
10. *Reduce the rough fish population.*
  - Large rough fish populations have been known to degrade water quality. Results of the fish inventory will provide more detail on the rough fish population and a more clear direction on potential future actions.
11. *Turn on the well.*
  - Under the existing permit from the DNR and State Statute, groundwater cannot be used in excess of 10 million gallons per year. As outlined in the current draft plan, this volume will be reserved for winter time aeration if water levels are below the intake for the in-lake recirculation system until such time that a more permanent, sustainable alternative system is in place.
12. *An independent study/water balance is needed.*
  - An independent study/water balance was completed by Barr Engineering Company for the Nine Mile Creek Watershed District and City of Bloomington.
13. *Control the invasive vegetation.*
  - There is currently very little vegetation in Lower Penn Lake. A vegetation management plan is an alternative that has been identified that may be desirable in the future. Much of the vegetation that grew up around Lower Penn Lake in 2009 was smart weed, which is a pioneering native species and not considered invasive.
14. *Hire a consultant to provide options that will work.*
  - There are no plans to hire a consultant to provide additional options. The options in the draft plan were identified based on collaboration with the DNR, Watershed District, and other similar projects in the area after receiving input from the public and Lake Association representatives. Success of any alternative will be dependent on many variables, some of which are not within the City's control.

15. *Maintain the native vegetation buffer.*
- The City intends to continue to maintain the native buffer areas on public property. Private property owners have been encouraged to maintain native buffers along privately owned shore areas as well.
16. *Clean the sediment ponds on a more frequent basis.*
- The sediment ponds surrounding the lake are inspected and maintained on a regular schedule as part of the City's Storm Water Pollution Prevention Program. Alternative K, if pursued, may improve the long-term function and effectiveness of these basins.
17. *Study the need for a lake bottom seal.*
- It is unknown whether or not a seal ever existed or was damaged during the excavation in 1975.
  - Most lakes and wetlands have a natural groundwater interaction where groundwater is either flowing into the surface water or the surface water is recharging the shallow groundwater table. An artificial seal to prevent this interaction would be detrimental to the groundwater/surfacewater recharge mechanisms, as noted in both the recent Barr Engineering Water Balance Study and a Blue Water Science Lake Study from 1990.
  - A lake bottom seal is not needed to meet any of the plan goals.
18. *Excavate the south end of the lake to provide deep water.*
- Excavation solely to provide deeper water is not necessary to meet any of the plan goals. This option was considered in the development of the current draft plan and is not recommended. The area near the south end storm sewer inlets will be investigated for maintenance sediment removal under Alternative B.
19. *Require the Christmas tree lot to pick up string, needles, trash, etc.*
- The Christmas tree lot is required to clean up after their use. Additional cleaning of the park area and parking lot is a specific alternative listed in the current draft plan. Volunteers or other groups could take this task on.
20. *Remove bad vegetation from the lake.*
- No submerged or floating leaf macrophytes were identified in the 2003 Use Attainability Analysis and only a few areas of emergent vegetation were noted along the shore line.
21. *Remove sediment from the lake.*
- Alternative B in the current draft management plan addresses the removal of accumulated sediment from storm sewer inputs.

22. *Construct fish barriers to keep rough fish out.*
- Alternative H has been identified in the draft plan to include construction of fish barriers to help address the rough fish population. This alternative would likely be combined with others as an attempt to improve overall lake water quality as well as the fishery.
23. *Create a vegetation management plan.*
- Alternative M has been identified in the draft plan to include a vegetation management plan. The success of this alternative would be contingent on improvements to water quality and the management of the fish population.
24. *Opposed to the use of city or state funds to augment the lake.*
- No City or State funds are proposed to be used to augment the lake except as noted in Alternative D of the current draft plan for winter aeration.
25. *If the current system for aeration works, then ok.*
- Comment noted.
26. *There are other groundwater augmentation permits in the metro area used for lakes.*
- The DNR reviewed several permits in which groundwater is being used to augment lake or pond levels. The permits are limited to 10 million gallons per year or less. Other permits exist that allow for groundwater or surface water augmentation for other uses (golf course irrigation, snow/ice making, etc.). Many augmentation permits were terminated in the 1990s. If other augmentation installations exist in the metro that exceed 10 million gallons per year for the primary purpose of maintaining water levels, the DNR should be contacted for enforcement action.
27. *The Lake Association had three small carp sent to the DNR for determination of a consumption guideline. Please provide the results.*
- According to lab results, Mercury and PCB levels were low for the three small carp provided by the Lake Association.  
Three small carp – average length 17.3 inches – average weight 1.8 lbs – Mercury 0.082 ppm – PCB 0.025 ppm.  
The Minnesota Department of Health publishes meal advice on their website at:  
[www.health.state.mn.us/divs/eh/fish/eating/mealadvicetables.pdf](http://www.health.state.mn.us/divs/eh/fish/eating/mealadvicetables.pdf)
  - Results of the fish consumption pertaining to mercury and PCB levels are generally outside the context and influence of this plan.
28. *Can the state (Mn/DOT or DNR) provide funding for some of the alternatives?*
- Some State-level grant opportunities may be available for implementation of some of the alternatives. Direct participation by Mn/DOT is unlikely as the Lake is not under Mn/DOT jurisdiction.

29. *Will these alternatives be successful in converting Lower Penn Lake from a stable turbid state to a stable clear water state?*

- While the alternatives identified are based on proven techniques to improve water quality, actual results will vary depending on environmental factors. Feasibility analyses will be necessary before moving forward with a number of the alternatives to better determine their actual effectiveness.
- All of the alternatives are identified as having potential to improve the quality of Lower Penn Lake. While the stable clear water state may not be achieved through this plan, measurable improvements in water quality should be expected.

30. *The well is needed to maintain the fish population.*

- It was demonstrated last winter that aeration can be successfully provided by means other than with the use of groundwater. It was further observed this summer that near historic low water levels did not result in an increase in fish mortality.
- Fish kills in shallow lakes are not uncommon and can be beneficial to the overall health of the lake.

31. *We must use all available means to prevent a fish kill.*

- The draft plan acknowledges the desire by the public to maintain the fish population in Lower Penn Lake. Alternative D provides for winter time aeration to help prevent winter kill of fish.
- Again, fish kills in shallow lakes are natural processes and are to be expected. There is a limit to the effort that can be made to prevent winter kill of fish at Lower Penn Lake.

32. *The Lake Association has the ability to apply for grants and fund certain projects. The City should not be solely responsible for implementation.*

- Comment noted.