

District of Powers Lake Quarterly Meeting Minutes
Friday, April 5, 2013

1. The meeting was called to order at 5:05 p.m. Roll Call
Present were Judy Jooss, Brooke Jensen, Nancy Michael, Mike Halvorson, Neal Kuhn, Jim Michels. Absent but listening telephonically was Mary Adams.
2. Approval of minutes from the 1/2/13 quarterly meeting and the 3/2/13 telephonic meeting.
Motion to approve January minutes by Judy Jooss, seconded by Brooke Jensen. Motion to approve March meeting by Judy Jooss, seconded by Brooke Jensen. Motion carried.
3. Citizen Comments
None
4. Treasurer's Report
The treasurer reported \$29,893.47 in the general cash fund, wetland cash fund of \$24,067.48 and a wetland CD fund of \$40,925.66. Our DNR \$6,500 final grant reimbursement is in process. We are in a much better financial position than last year.
Motion to approve by Nancy Michael, seconded by Neal Kuhn. Motion carried.
5. Jefferson Island Channel {JIC} – Phase 2: David Kraft, Hey & Assoc., Travis Holte, WDNR
[Please refer to Exhibit A – Channel Plan & Profile]
David performed a survey and profile of the channel showing sediment depth which produced the dredging alternative handout which all received. The options were given for the north and south ends of the channel. 3 dredging options were given for the north and 2 for the south end. He then discussed the options as to amount, cost, need, possible benefits and type or method of dredging. Large and small exhibits of this survey were provided. The profile and dredging alternatives will be made available on the website. At normal water levels, there is about 1 foot of water in the channel. During a drought like last year, it would be a lot less than that. There is a little more depth on the south side. Upstream of the culvert there is 5-6 ft. of sedimentation, where it narrows out you have 2.5 ft. of sedimentation. This amount of sedimentation over 20 years is not to be unexpected. Using 831 as the average centerline sediment elevation, they looked at what would be a reasonable goal, how much depth might be wanted in the channel, and how much would have to be dredged to accomplish that. There is not much sediment accumulation in the culvert – approximately 6 inches. After gathering this information, they then proceeded to produce the JIC dredging alternatives sheets.
[Please refer to Exhibit B – Jefferson Island Channel Dredging Alternatives]
Costs of these alternatives are dependent on disposal site available. We are probably looking at a \$40-\$75 range per cubic yard. Permitting costs will probably increase. Cost of restoration at the channel site and disposal site must also be considered. Alternative 1 probably would cost approximately \$125,000. Final per yard dredging costs will be largely dependent upon the selected disposal site {s}. Costs are per yard estimates for dredging only and do not account for permitting and engineering, as well as construction contingencies such as soil erosion and sediment control measures, dewatering, mobilization and any necessary restoration at the dredge or disposal site.
Mechanical dredging seems to be most practical for accessibility. Mechanical would increase damage to the area and is not practical on the south side. Hydraulic dredging is more costly, has permit issues, and dewatering bags would need about 6 months to dry out on shore and produce a mucky odor. Cost of it can be astronomical.
The backhoe and the barge would probably use the Knolls boat launch for loading onto trucks for removal. It is not an easy dredge project for this location no matter what method is selected. Could proceed using land based equipment which would be easier than transporting all the way across the lake. This will give a basis for the decision of cost/benefit analysis – this is what it will cost, this is what we will get out of it and then we can weigh the result and cost.
As far as their opinion on “should the DPL do this?”, from a use perspective for the community the result would be recreational for canoes and kayaks. There is not a tremendous ecological benefit to the lake. A deeper channel would lead to warmer water for fish in the spring benefiting $\frac{3}{4}$ of an acre of open water in the channel vs. all the rest of the open water on the lake. As far as a benefit to Jefferson Bay, the

more you open the channel, the more you encourage sediment into the bay and out of the bay. This would not be temporary from the dredging. When you have organic sediment and you encourage the water to move back and forth in the channel, the water lily population on the south side of the channel probably stops it. They would not recommend blocking the channel to stop this from happening. The idea that this would increase the health of Jefferson Bay does not have a lot of scientific merit. Opening the channel does not buy you anything other than recreation. The accumulation of sediment in the channel now provides a good environment for reptiles and amphibians. The idea that the channel is some sort of a conduit that needs to connect the lake with Jefferson Bay for the health of either does not have a lot of scientific merit. In a dry year like last year, the channel could look pretty bad but in a normal water year a canoe or kayak would have the 12-18 inches it needs to go through there. That is a decision we would have to make but he can tell us that there is really not a substantial ecological benefit to the lake. The concerns brought up at earlier meetings regarding the turtles and frogs may have been a level of emotional reaction based on wanting to open the channel. In a drought year, the turtles and fish will move but there were plenty of frogs out there last summer when Dave was there. Once water levels come up in the spring there is nothing to discourage them from returning. They actually prefer the organic sediment for hibernation. That little piece of habitat in the channel is not critical to any species on the lake.

Restoration costs on the south side would not be a concern if we do dredging with barges. Restoration from shore with creating a berm could range from \$1,000 - \$10,000. It would be more cost effective to work from the shore but restoration costs would then increase. They would then do a cost analysis to see whether spreading on farm fields or restoration would be more cost effective. Restoration on the steeper side would not be necessary. By location, there is not an easy dredging location for us. In addition to the leaves, algae die off also adds to the sediment. There is really nothing more we can do about algae since the phosphorous ordinance is already in place. In the main areas of the lake this happens also as the less healthy algae blooms move out to open water and you have a bigger area to work with. In a more stagnant area like this, you will have more algae growth, The healthy duckweed will grow and contribute to the biomass. There is no real ecological benefit to the dredging. The only benefit to the dredging would be to allow canoes and kayaks access and have it be more aesthetically pleasing. The low water level decreased the aesthetics. In a normal water level year, the sediment will be below the water level so it would not look a whole lot different after dredging. This next section includes comments from David Kraft and Travis Holte.

Travis wholeheartedly agrees with what David has said so far. Mechanical dredging depends on land access. The banks are stable with large hardwood growth creating a natural barrier. Prevailing winds from the main lake basin create some flow but not a major issue. The main contributor to the deposit is leaves. 2 feet of sediment have accumulated over the past 25 years which is not unreasonable. Sediment moving out of the channel has created a necessary substrate for water lilies on the bay side. Anytime you open this channel to recreational traffic you increase flow over a greater distance which is disruptive to current population of turtles and frogs. Due to new DNR requirements, another sampling may be required to test for contaminants which could cost \$3,000 - 4,000.

Hydraulic dredging is relatively expensive and would involve the DNR wastewater treatment group. With these additional permitting costs an estimate of \$125,000 might be more accurate. The reason for this would be more aesthetic than ecological. A negative effect would be that increased flow would move more duckweed and organics into the lake about 20-50 feet. If you open the south/bay end, you will increase flow to areas with a greater depth and make them shallower. The impact would be seen relatively quickly. The culvert drives the hydraulics. Organic sediment has benefits to certain kinds of aquatic insects also but would not be great for areas with a sand bottom. Hydraulics would be the same. It is really about how big of a boat you want to get through there. Channel will be fine for canoes/kayaks in a normal year. During a drought year, maybe not. If we are ok with that, there is no need to dredge. We do not want to encourage wave runner traffic and possibly create an attractive nuisance if someone would get stuck in the muck there.

David will create a memo to distribute. Travis said if area substrate is disturbed it might encourage growth of AIS in these areas. He has talked to Heidi Bunk and Craig Helker of the DNR and they plan to come out in the summer and look at the channel.

6. Aquatic Plant Management:

The proposal from Stantec indicated that the post treatment survey performed on August 8, 2012 showed 5.95 acres of EWM and 0.60 acres of CLP. Since CLP can survive in lake sediment for 5 or more years there are likely to be more mapped. The EWM treatment equated to an 84% reduction this year. There is an option of monitoring infestations for one or more years and consider treatment options when they get to nuisance levels. An estimate before Spring 2013 pre-treatment survey would be approximately \$12,100. Taking off a year could set us back several years. Neal Kuhn made a motion to move ahead with the Stantec proposal. Nancy Michael seconded the motion.

7. Powers Lake Issues:

Jim Michels wondered if it would be possible to research past dredging permits. He also requested that the DNR notify the district if permits when permits are issued in the future. Travis said copies of these can be easily obtained and he would be glad to do this. Notification of the DPL can be added to the list of entities normally notified.

At the outlet, the Village of Bloomfield did work on the culvert [although it was believed they did not change the invert] and we need to establish the benchmark and the measurement for high water. David said their survey showed the invert was the same. We need a chiseled square on the top of the new headwall and we will inform the Town of Randall what that elevation will be. A simple, fixed staff gauge could be installed at the outlet. A more sophisticated weather station could be obtained from the USGS that would be solar powered.

Concerns about the low water level on Powers Lake churns up the bottom of the lake have arisen with the lower water levels. Rather than a low water slow no wake ordinance, education of populace would be preferable. Website and newsletter can reprint the publication from last year.

8. SEWRPC Protection Plan: Due to the length of the meeting the issue was moved to sometime in the future.

9. Watershed Management: A motion to have Hey & Assoc. establish a benchmark, install a staff gauge at the outlet and get us a proposal on a more elaborate staff gauge for amount not to exceed \$1,000 was made by Judy Jooss, motion was seconded by Nancy Michael. Motion carried.

10. Wetland Management

11. Wisconsin Lakes Convention: The convention will be held in Green Bay April 9-11. Judy will be conducting a workshop and attending. Jim made a motion to approve Judy's expenses for the convention.

12. Town of Randall/Kenosha Co. Issues: Mike said he has a check for \$2,500 from the Town of Randall for the DPL.

13. Village of Bloomfield/Walworth Co. Issues: 2 new trustees are on the Village board.

14. Newsletter: Newsletter continues to be a strong communication link with the residents. We need to find a recording secretary.

15. DPL Website: Insert Mike's name on website. Take Colleen off newsletter.

16. Preparation for Annual Meeting: It will be at the same location August 2nd at 7 p.m. Jim will make application for the room. The quarterly board meeting will be Friday, June 21st. An informational meeting on the JIC project could be part of the annual meeting.

17. Citizen Comments

18. Other

19. Adjournment: The meeting was adjourned at 8:00 p.m.