

Minutes: Big Chetac and Birch Lakes Association Stakeholders Committee Meeting – Aug. 14, 2017

Facilitator: Dave Blumer, LEAPS

Minutes prepared by LEAPS based on a digital recording of the meeting.

1) Call to Order/Roll Call

The meeting was called to order at 2:07pm at the Birchwood Senior Center

Participants

BCABLA: Bob Reynolds

Town of Birchwood: Romaine Quinn

Town of Edgewater: Bill Zimmer

Village of Birchwood: John Depoister

Fred Thomas Resort: Julie Thomas Telitz

Birch Lake Representative: Jay Hatcher

Red Cedar River Partnership: Gerry Johnson

WDNR: Alex Smith

Absent

Jim Delmedico, Maple Terrace Resort; Mark Robinson, BCABLA

2) Approval of Previous Minutes

Minutes from July 24, 2017 were approved after discussion and review of the minutes with the group. Once this was completed, a motion to approve the minutes was made by Julie Thomas Telitz and seconded by Gerry Johnson. The motion passed unanimously.

3) Facilitator's Update

In follow-up to the discussion related to the fisheries in the July meeting, Dave asked Gerry Johnson to give more detail about the Fisheries meeting the Red Cedar Lakes Association (RCLA) had with Aaron Cole, the WDNR Fisheries Manager for Barron County back in July 2017. Dave had mentioned this meeting in July and how it ended with changing the walleye limits on Red Cedar.

Gerry started with some background: WDNR creel data from 2006, 2010, and 2017 with an emphasis on walleyes. Red Cedar is a naturally reproducing lake that is also stocked by the WDNR and by the RCLA through Walleyes for Tomorrow. Gerry handed out a graph that shows how the size structure and numbers of walleyes have changed through the three creel surveys. Essentially the number of walleyes

per acre is going up, but the mean and median size of the walleye were going down, making it difficult for anglers to catch walleyes that were big enough to keep under the current regulation of 3 fish over 18 inches. The lake has a reputation for being able to catch lots of walleyes, but very few over 18 inches. All other fish species in the lake were also increasing except for perch.

The RCLA asked Aaron Cole to present current data on the walleye in the lake and set up a special meeting open to the public and attended by around 125 people to discuss fishing in the lake with the WDNR.

The general consensus of the group and the WDNR after the meeting was that there are too many walleyes in the lake, more than double the fish in 2017 that there were in 2010, which was limiting the growth of these walleyes to larger sizes. A change in the size limit for walleyes was proposed by the group and agreed upon by the WDNR. Instead of 3 fish over 18", the limits changed to 2 or 3 walleyes between 15-18 inches, and one walleye over 24". This sets up a slot size limit between 18-24 inches that protects the larger female egg laying walleyes, while also letting fishermen take home more of what they catch. The new bag limits will go into effect in 2020.

The point of this discussion was to show that the lake group does have the power to make changes in the fishery that might not otherwise be offered by the WDNR. If there is enough interest, and a reasonable request, it was felt (at least by the RCLA) that the WDNR was willing to listen and make changes if necessary. This may be pertinent to the BCABLA as they pursue a fisheries management plan over the course of the next year or two that would complement the Comprehensive Plan.

Comments

It was mentioned that the walleye issue in Red Cedar sounds like the same ones in Big Chetac - lots of walleyes, but none big enough to keep. Big Chetac also has an 18 inch size limit on walleyes.

Apparently the Red Cedar Study showed no impacts on the fishery from herbicide use in Red Cedar and Hemlock, although the size of their treatment is not comparable to the ones down in Big Chetac.

Ratio of male to female walleyes is very high, more males than females – we need a ladies night out for female walleyes!

The RCLA discussion was a pro-active attempt at addressing an issue before it became too tough to handle, and it worked out well. The RCLA, public, and State were apparently all happy with the results.

Does GLIFWC or Tribal Resources stock the Red Cedar lakes or Big Chetac? Not sure of the answer, but can get an answer.

More explanation was asked for about what Walleyes for Tomorrow does. Apparently WforT set up a station for two years on Big Chetac, but since no fish were ever found during fall surveys that could be attributed to the WforT process, it was discontinued.

Fishing Success Survey

Dave handed out a document showing the most recent numbers through August 6th. There was nothing really surprising in the results. It also reflected the data from all of the surveys collected. Fishing satisfaction is pretty much in the middle, with some thinking it great, and others thinking it terrible. We need more involvement in it. Doolittle Park dropped out, and several resorts are not collecting any surveys. Dave wants to set up at least two more resorts before the end of August.

4) Participant Updates

Jay wanted to know if he could give his email out to folks who might want to contact him. We said yes definitely. Gerry informed the group that he continues to talk about what the BCABLA is doing with the RCLA board. Bob suggested that locals are only thinking about herbicide application. Bill Zimmer wants to engage more people outside of the Town of Edgewater board meetings. The August meeting has been posted on the Edgewater page.

Several others, including John Depoister and Romaine Quinn suggested that people are just waiting to see what this committee comes up with.

5) Discussions

Water Quality Goal

Dave laid out what it was that needed to be accomplished during the discussion. One was to complete the water quality discussion that began during the July meeting. The other was to discuss aquatic plant management goals, and then wildlife and public involvement.

Dave reviewed the water quality discussion that started in July. Essentially the group was still trying to determine what to include in the goal. Should it be based on a value that can be measured, or a more subjective lake health/use goal?

The water quality goal in the original (2010) plan was to “reduce the number of days the lake experiences severe algae blooms (>30 µg/L) that impact lake use.” The water quality goal was similarly written in a 2015 first draft revision of the original plan. The WDNR, in a technical review letter in early 2016, suggested the lake group “consider re-wording this goal to "Reduce annual summer mean TP concentration to XX ug/L" or "Increase summer mean secchi depths to X feet." Annual means are easier to quantify than daily concentrations.”

Dave reviewed total phosphorus and chlorophyll data collected on Big Chetac over the last few years. Although Table 1 was not part of the documents handed out at the meeting, it is included here for reference. The state standard for phosphorus in a shallow drainage lake is 40 ppb.

Part of the discussion centered on what is an appropriate value to use. According to the alum study done by Bill James (UW-STOUT), if an alum treatment was implemented a phosphorus value of 45 ppb could be reached which is still higher than the state standard. Based on past data that suggests that Big

Chetac has always had high phosphorus, 40 or even 45 ppb of phosphorus may not be a reasonable goal. None of the average annual concentrations of TP in the last ten years were in the low to mid 40 ppb. The closet was in 2009 when the annual average was 48.25ppb. In terms of phosphorus readings, when considering the four best years in the last ten years, the average is 55.3 ppb.

Table 1 – Total Phosphorus (TP) Values in Big Chetac Lake

| Big Chetac TP (ppb) Central Basin | | | | | | | | | |
|------------------------------------------|-------------------------------------|------|------|-----------------|-----------------|-------------------|------------------|-------------|---------|
| Year | Average | Min | Max | Range (max-min) | Best Year (Ave) | Best Year (Range) | Best Year (High) | Ave Ranking | Ranking |
| 2017 | <i>data incomplete at this time</i> | | | | | | | | |
| 2016 | 58.8 | 28.2 | 88.5 | 60.3 | 3 | 2 | 2 | 2.33 | 2 |
| 2015 | 71.35 | 40.7 | 117 | 76.3 | 7 | 4 | 5 | 5.33 | 5 |
| 2014 | 69.82 | 32.4 | 130 | 97.6 | 6 | 6 | 6 | 6.00 | 6 |
| 2013 | 96.95 | 45.1 | 155 | 109.99 | 9 | 8 | 8 | 8.33 | 8 |
| 2012 | 101.25 | 50 | 184 | 134 | 10 | 9 | 10 | 9.67 | 10 |
| 2011 | 66 | 35 | 136 | 101 | 5 | 7 | 7 | 6.33 | 7 |
| 2010 | 60.5 | 30 | 85 | 55 | 4 | 1 | 1 | 2.00 | 1 |
| 2009 | 48.25 | 21 | 98 | 77 | 1 | 5 | 4 | 3.33 | 4 |
| 2008 | 53.75 | 30 | 94 | 64 | 2 | 3 | 3 | 2.67 | 3 |
| 2007 | 92.75 | 33 | 175 | 142 | 8 | 10 | 9 | 9.00 | 9 |
| Big Chetac TP (ppb) North Basin | | | | | | | | | |
| 2017 | <i>data incomplete at this time</i> | | | | | | | | |
| 2016 | 55.5 | 37.2 | 71.9 | 34.7 | 1 | 1 | 1 | 1.00 | 1 |
| 2015 | 71.125 | 38.3 | 103 | 64.7 | 3 | 3 | 3 | 3.00 | 3 |
| 2014 | 62.5 | 34.9 | 91.1 | 56.2 | 2 | 2 | 2 | 2.00 | 2 |

At this point it was wondered what the Tainter-Menomin TMDL had for a water quality goal. It was thought that it was based on increasing the number of days the lake could be used. Whatever the goal is, it was asked who came up with it. Alex said it was the WDNR and the Army Corp of Engineers, although he was not sure what the actual goal was. Both Alex and Dave will look into what the Tainter/Menomin TMDL has for a water quality goal.

Alex suggested that maybe the water quality goal in the plan should be a more broad-based goal, almost a mission statement and that the measureable goals would be part of the objectives that support the goal.

Jay commented that the average person, including himself, does not understand the meaning of the numbers. All he wants is to be able to use the lake to swim, fish, and recreate without the stench that happens when water quality gets really bad.

Alex said this was a good point and asked just what the committee wanted. Does it want clearer water in the lake or is some green water OK?

Julie commented that if the lake could be like it has been in the last couple of years, things would be great. The lake is never going to be a clear lake, but less scum and no stench would be a good thing.

Gerry suggested that it is a matter of the good years verses the bad years.

Alex suggested we could look at the numbers from the good years and use them as a base for setting goals.

Bill thought a document that shows how phosphorus and chlorophyll correlate to water clarity (Secchi) in Big Chetac that might be good. Alex commented that Secchi may not be a good measurement as it really doesn't change that much, and really doesn't reflect conditions in back bays since Secchi disk readings are taken in the middle of the lake.

Bill wondered if management goals could be based on expected trends, i.e. moving into a dryer period verses a wet period. This is difficult as it is very hard to predict trends with any certainty these days.

Alex added that if water quality management could make the worst years better, the good years would be way better.

Jay asked if chemical management is dependent on weather conditions, meaning if the lake is in good shape CLP management would not be done. If it was in bad shape it would be done. The answer was no, if CLP management is committed too, it would be done for a specified amount of time regardless of weather and lake conditions.

The Cedar Lake Alum Treatment was brought up at this time. Cedar Lake is a sizable lake in Polk County that is starting a multi-year alum treatment program. Cedar Lake did and continues CLP management and worked to control external inputs of phosphorus to the lake.

The Big Chetac Alum Study came up. Big Chetac, in theory, would be easier to do alum on than Cedar, as the external inputs to Big Chetac are limited in the first place.

Julie commented that in the past conversations, the lake association said CLP needed to be controlled before alum could be implemented.

Alum could be used, and it would improve water quality. It may be the only management alternative that really could reduce the phosphorus level any significant amount.

Dave added that alum is a viable option and supported by the WDNR, but it is not a done deal. There is a lot of constituent education that is needed before it would be implemented.

Alex mentioned again, what is the goal or vision for the lakes? Is it to make it better or keep it the way it is? If it is to make it better, alum is likely the most sensible approach to meeting that goal. Alum could make the worse years better.

Dave added that there are other things to do like shoreland best management practices, watershed improvements, CLP management, and more that could help as well, albeit not very much.

Alex commented that the 3 years of CLP management on Big Chetac was not set up to determine the impacts of it on water quality, it was set up to determine if native plants could recover if CLP was removed.

Bob wondered if we could be kept abreast of the results of the Cedar Lake project that is beginning this year. Bill wanted to know if there were other examples. There are several lakes in Polk County that do CLP management and have incorporated alum as well. Those who design management plans that include alum have learned a lot about it from lakes like Wapogasset, so planning now is better than it was even just a few years back.

Dave brought the discussion back to the main question. How do we address the goal in the new plan? Is it broad based or specific with a numerical value?

Jay added that numbers are just measurements; the bottom line is we want a more usable lake. Bill commented that “usable” is different for everyone.

Bob asked what the EPA and DNR want, numbers or a more broad-based generic goal. These entities general want numbers. A number was proposed based on past sampling – 60 ppb. It was felt this was too high, something in the 50’s might be better.

The question was asked if we could get to the 50’s with just the alum treatment. The answer was yes. We could not get there with only controlling external sources of phosphorus as most of it comes from within the lake.

Alum has a few limited side effects which were discussed during the July meeting.

The questions was asked what the biggest obstacle to using alum was – the biggest obstacle is cost, and a less than definitive feeling for how long the positive impacts would last.

Grants could be used to help, but would not cover the majority of costs. Cedar Lake has several grants and is a Lake District. So Big Chetac and Birch would have to figure out how to get the money.

Dave asked Bill (Town of Edgewater) how he thought his constituency would react to a proposed alum treatment. He suggested that it would all be a matter of education. They want to know how much it will cost and how long it will last.

Alum has not been mentioned much in lake association meetings, but most members are in support of actions that would improve water quality.

Dave suggested that alum treatments were not tied directly to CLP management. Alum could be done with or without CLP management, however, after alum was implemented; it would be likely that aquatic vegetation would increase. CLP may not expand much as it is already a clear water species that grows in the spring, but it may get denser. Native vegetation later in the year might increase if water clarity is maintained longer into the season.

Again back to how a goal for water quality should be stated and what it should be. If it is broad-based it would appeal to the average public who wants to see a nicer lake to do things in. So we should ask the constituency if the current conditions are what they like and if the answer is yes, we have both a broad

goal, and a numerical value that can be used to set measurable objectives. With that, we can determine the few ways there are to meet the goal.

The general decision was that the water quality goal should be more general, with the objectives setting numerical values that could be used to measure the success of management actions.

A motion was made for a water quality goal for the lakes by Jay “subjective, broad-based goal for the lake with a quantifiable value (objective) to measure the success of management and to let Dave and Alex come up with the actual written goal”. Gerry seconded the motion to open it up for discussion.

Julie stated that the public needs to make an effort to attend meetings and learn what the Committee is learning. If they don't, they aren't completely aware of how one thing impacts another and can't make an educated vote to support or not support the management plan.

The public has to hear this and make the decision, hopefully the right decision. If the public wants what we have now, let them know that we can maintain this and how, and then let them decide if they want us to. Hopefully most will.

Educating the general public is the hard part, not everyone wants to go to meetings. Maybe a document to send to everyone in the lake association and other stakeholders should accompany the public meeting. The website has everything, but not everyone goes there either.

If we present our goals to the constituency, and they agree with them, then we can present the ways to reach those goals and ask if this is truly where they want to go.

End of discussion – the motion made by Jay and seconded by Gerry was called for a vote. It passed unanimously.

Aquatic Plant Management

Dave presented three main aquatic plant management goals: 1) management to improve water quality; 2) management to provide nuisance and navigation relief; and 3) management to provide both 1&2. Each of these goals comes with a pretty standard set of objectives. If the goal is to improve water quality through plant management, then a lot of CLP is going to have to be managed. The most feasible way to do this is through the use of herbicide. If the goal is to provide nuisance and navigation relief, then harvesting becomes the tool of choice. If the goal is to do both, then some combination of herbicides, harvesting, and physical removal will be necessary.

Another possible goal of plant management is to increase the amount of native plant growth. The three years of CLP management essentially showed that this goal is not realistic, as the three treatment years did not increase native vegetation. Another factor, most likely water quality/clarity limits the plant growth more than the CLP does. So this goal is not included.

A lot of the constituency is concerned about taking out too much vegetation and the negative impacts that causes to the lake. This concern is based primarily on the results from the first two years of CLP treatment in Big Chetac.

At this point Dave pulled out the results from the 2017 whole lake aquatic plant survey in Big Chetac which had been completed a week or two earlier. It showed the number of points with aquatic plants to be higher than in 2014, with additional diversity as well. CLP numbers, although low in the summer months anyway, were lower than both 2008 and 2014, the last two years that a whole lake summer plant survey was completed. Only CLP declined in 2017, everything else increased, with about a dozen species increasing a statistically significant amount.

Gerry asked if the results could be directly correlated to the three years of CLP treatment. No they can't because the points that are in the treated areas have not been taken out of the overall results, and no comparisons have been made.

There were more points included in the littoral or plant growing zone of the lake in the 2014 plant survey (493 pts) than there were in the 2017 survey (352 pts) suggesting water clarity was better in 2014 than 2017. The number of actual points in the littoral zone was also up in 2017 (201 pts) compared to 2014 (148 pts). As already mentioned the number of points with CLP was down in 2017 (16 pts) compared to 57 pts in 2014, and 131 pts in 2008. In general plants seem to be rebounding.

Diversity is pretty high in the lake, but most of that diversity is in the mouths of the creeks coming in.

Julie asked if green water impairs the plants. Yes it does. She then wonder if an argument can be made that alum and clearer water would support more plants and more plants would equate to better habitat and more food to support the fishery. Again the answer is yes. She wondered why this point hadn't been made to the general public.

Jay asked how many of the plants identified are invasive species, only one, curly-leaf pondweed. Then he asked how it got here. No one really knows, not even how long it has been in the lake.

Gerry went back to the three aquatic plant management goals that were presented at the beginning of this discussion. A fourth option was added – no aquatic plant management.

Bill asked if water quality improvement will require CLP management. It would help, but not necessarily be required to make it work, at least not right away. If an alum treatment increases aquatic plant growth additional plant management may have to be considered – for both CLP and native plants.

A motion was made by Julie to have a goal for aquatic plant management that both may help improve water quality and provide nuisance and navigation relief. The motion was seconded by Jay. It passed unanimously.

6) August 29th Public Meeting to Present Goals

The purpose of the August 29th meeting is to lay out goals that the committee has come up with for the new lake management plan and to get feedback on them from the public. Once the goals have been discussed and perhaps approved by the group, ways of meeting those goals can be discussed briefly. However final management objectives and actions will not be determined during this meeting. That will be the task of the Committee and recommendations will be brought to the public at a later meeting for discussion and approval.

Dave will send out a list of the goals to the Committee for review prior to the Public Meeting.

The Public Meeting is to be held on Tuesday August 29, 2017 from 7-9pm at the Birchwood School Commons.

7) Other Goals

Wildlife was briefly discussed with the knowledge that there were few concerns related to wildlife that were voiced by people who were interviewed, despite being given the direct opportunity to voice those concerns. Most concerns were about declining geese and ducks on the lake.

8) Other concerns

John Depoister reiterated that cost is likely to be the biggest concern among the constituency and wonders how things will be paid for. One way is the formation of a Lake District. This was met by groans, as forming a lake district would be no easy task for the Big Chetac and Birch Lakes constituents. Alex suggested that maybe a local government legislator could step up. This would be great, but unlikely.

Bob inquired about the next Stakeholders Committee Meeting. It will be held in late September with a date yet to be determined.

The meeting was adjourned at 4:25pm

Stakeholders Committee Meeting Minutes are respectfully submitted by Dave Blumer, LEAPS. Initial draft completed On 8/22/2017.