Big Pine Lake Association (BPLA) Annual Meeting
August 16, 2014 at 10:00 a.m.
Crosslake Community Center

Members present:	Bill O' Brien Vice President, Terri Rammer Secretary, Dennis Bengtson Director at Large, Ken Ormsbee Director at Large, Richard Rammer Director at Large.
Members Absent:	Nancy Rudberg President, and Dave Rudberg Treasurer.
Others present:	Speakers; Rob Hall, Assistant County Engineer, Crow Wing County; Scott Hedlund, Sr. Project Manager, Short Elliott Hendrickson Inc. (SEH); Lindsay Roberts McKenzie, Project Engineer, SEH; and approximately 45 members of the Big Pine Lake Association.

10:00-10:20 am - Check-in and brunch.

All attendees received a BPLA packet that included a meeting agenda; last year's meeting minutes; the Treasurer's report; BPLA highlights of 2013-2014; an index of relevant BPLA documents, meetings, and an activities chronology; President's letters from 9-5-13 and 6-24-14; and BPL water level charts and information from April through August 14, 2014.

10:30 am - Terri Rammer, Secretary, called the meeting to order.

Bill O'Brien spoke regarding our current lake situation and the BPL dam's history, and then introduced our guest speakers. Bill mentioned that the County owns the dam and that BPLA has a legally binding agreement with Crow Wing County (CWC) directing that we maintain the dam and fund maintenance costs through the Subordinate Service District (SSD) that each property owner currently contributes $200 per year to. Bill then introduced Rob Hall as our first speaker.

Rob specified that he is primarily a road engineer who also deals with contracting for temporary maintenance of the BPL dam. He worked with FEMA in 2012 when CWC was declared a disaster area due to flooding that occurred that year. Rob provided some background on the BPL dam, stating that in 1970, BPLA petitioned the Minnesota Department of Natural Resources (DNR) to install a dam for the same reasons we need a dam today. The DNR would not issue a permit to a private group

and mandated that the dam be owned by a local government agency. Rob said that 45 years ago, the CWC board signed agreements to the effect that CWC would be the primary BPL dam owner and that the BPLA would maintain it. Throughout the years, there have been both major and minor repairs made to the dam and it is showing deterioration from age. The CWC board realizes that it is in need of repair and that adequate funds do not exist in the SSD account to perform major structural repairs. CWC is helping us look for a permanent, long-term solution, which we are getting closer to understanding. However, the dam is currently in need of some maintenance-level repairs that the SSD account is currently capable of funding. SEH is working to finalize the feasibility study that the CWC board agreed to fund in 2013. That study evaluated and made recommendations regarding various dam designs and configurations. The next step will be to gain input from BPLA members. Rob then introduced the SEH speakers.

Scott Hedlund, who is located in Brainerd, explained his role with SEH. Lindsey Roberts McKenzie, located in St. Paul, explained her role in in the dam feasibility study and stated that she has nine years of experience in hydrology, flood plain management, flood control, and dams. On this particular project she is the Project Engineer and worked with an SEH Senior Hydrologist out of Omaha who performed the analysis and evaluated dam replacement or repair options for the BPL rock dam. SEH looked at concrete, sheet pile, and other rock dam designs and analyzed what would be most financially feasible and effective, given the water flows we have.

Lindsey displayed two drawings with different configurations for the audience. These were considered by SEH to be the best two options; a recommendation that CWC and the BPLA board agreed with. One showed the dam being built below our existing rock dam, so that the existing dam would collect bogs and other debris, providing added protection to the new dam. The plan also included a fish passage which the DNR requires. The fish passage would also act as an emergency overflow during times of high water. Audience member, Pam Werb, asked who owns the land on the east side of the dam. Rob Hall answered that either CWC or the State did and Pam then commented on the erosion on the east side, asking how far back the property went. Rob's response was that it is a large parcel that extends almost all the way back to Greer Lake. Pam commented on the previous erosion that has occurred on the east bank, which is way she was wondering how far back the parcel went.

Lindsey commented that the tie backs included in both proposed designs would prevent further east bank erosion. She also stated that the point where the river bends is where highest energy of flow exists and that the fish passage would be act as a relief valve for some of that energy. Pam went on to ask about the location of the new dam and how far downstream it would be from the old dam. Lindsey's response was that it would be approximately 50-100 feet downstream of the existing

dam, but that the exact location would be determined during the design phase. Pam asked about the Windom dam and Lindsey explained that their dam had very different requirements since they wanted to run water out rather than maintain a certain level of water. This was the reason for installing rock ripple dam, which consists of tiers of smaller rocks. Bill Werb then asked about the new design and whether it would stabilize the lake level and prevent bogs. Lindsey replied that it would stabilize the water fluctuations and if the Cross Lake USACE (U.S. Army Corps of Engineers) dam were to release large volumes of water we would have better access to remove bogs.

The next question came from Jim Perkse when he asked if the minimum lake elevation was from the top of the dam by the steel post and the concrete slabs on the dam and spill way. Lindsey replied that this was the elevation they looked at, as well as a range of data including past information provided by BPLA and from the water level reports provided by Dennis. Jim also asked that if our existing dam had a life expectancy of roughly 50 years with significant maintenance required, what would the life span of the new dam be? Lindsey answered if we ended-up building a sheet pile weir dam, it should have an estimated life span of 50 to 60 years, but that the amount of maintenance required would be much less. Jim Perske said that someone had said that they are not convinced the new dam would help us when we have significant rain fall or when there is a drought because we cannot control our dam like the Cross Lake USACE dam. Jim didn't see how a new sheet pile weir dam would allow us to control water levels on our lake. Lindsey replied by saying that they assessed the situation with very high and very low outflows from the USACE dam and that it gets a little complicated with the fish passage. The top control is set by the top of dam elevation. That low water level can get complicated related to DNR permitting where they balance the issues of lake usability and the needs of fish to pass downstream into the river. Lindsey showed on the design that if the water level gets lower than that the fish passage, that water will not pass through the dam.

Pam Werb thanked SEH for sending the 34 page report so that she could review it. She stated that she is very concerned that the longer the periods of high water from the release of the Cross Lake USACE dam are sustained, the higher the potential is shoreline erosion. Her concerns were about high water levels and erosion that had already caused her to acquire permits so that she could perform erosion repairs on her property. She stated that the longer we maintain artificially high water levels, the more we encourage shoreline erosion. Pam said that in the 58 years she's been on the lake, she could always put her dock out further and lower it; that the lake has always been useable for recreational purposes; and that she's always been able to use the river. However, what she cannot deal with are high-water levels. Her opinion was that what we are doing is simply replacing the current dam with another one that will maintain higher water levels. She was concerned that sheet pile dam will hold back the Cross

Lake USACE dam water even better than the current dam, which would lead to even more erosion and flooding.

Jim Perske asked if we were to get an abundance rainfall and flooding, wouldn't it just go over the entire top of the sheet weir dam? Ken Ormsbee stated that we have a really wide standard deviation of water levels right now and asked if a new dam would lower the deviation so we would have more predictable water levels. ***Lindsey said this was correct and that the top elevation would be set during final design to ensure that there would be adequate capacity over the top of the dam and through the fish passage to quickly release energy and water volume. Lindsey pointed out that if we received a massive inflow of water from the USACE dam, that much will get pushed over the top part of the dam before it goes the fish passage, which also functions as a release valve during high flow volume periods. So, the design of the new dam needs to accommodate the high inflows that we receive and yet maintain high enough low water levels that recreational watercraft are not grounded on dry lake beds and stranded on boat lifts.***

Ken Ormsbee stated that Dennis Bengston had spent a lot of time measuring lake levels on a daily basis since early spring and that he had also performed a lot of analysis correlating outflows of the USACE dam to our lake levels and that there is a direct correlation. Dennis stated that the people who live on our lake already know that we do not control the Cross Lake USACE dam. Corrine Hodapp was our guest speaker last year and gave us a wonderful presentation, stating that USACE's number one priority is to preserve that dam structure. As such, they cannot allow the Whitefish Chain (WFC) water levels to get so high that they would threaten the USACE dam. They operate the dam so as to maintain WFC pool elevations within a 6" band, so when the pool elevation starts to exceed that, they have to open the gates. We understand this and have to live with it. However, there is also a flip side, which is that by law, USACE cannot close the gates entirely. So, BPL has the benefit of always having a minimum inflow of 33 cubic feet per second (cfs) since one gate is must always be open with water flowing. The WFC surface area is 36 times more than our lake, so slight adjustments in USACE dam outflow create noticeable impacts to BPL water levels.

Dennis reiterated that both high and low water conditions can be controlled with a design that establishes proper elevations, based on DNR specifications. ***Dennis went on to say that SEH is especially focused on our achieving our requirement that when water gets high we need to be able to quickly flush it downstream so that we alleviate flooding and sustained high water levels***. ***Dennis explained the "bounce" term as being the impact of high USACE dam induced inflows on BPL lake levels and the amount of time required to normalize lake levels following those high inflow periods. However, we have two big issues: 1) Reducing bounce and dissipating high volume inflows to***

avoid flooding and high lake water levels, and 2) Maintaining minimum lake water levels when our inflow is reduced to 33 cfs and there is minimal precipitation. If we get that minimum level set correctly on the new dam, we will never again have boats sitting on dry lake bottoms or stranded on lifts since we always have water coming into our lake. Lastly, Dennis suggested that people may want to check-out the USACE website at the following address to familiarize themselves with the inflow, outflow, and pool elevation data available only a daily or historical basis. (http://www.mvp-wc.usace.army.mil/projects/Pine.shtml)

Ken Ormsbee stated that, last week the outflows were at the minimum 33 cfs and his boat had been stuck on its lift all weekend, but that we received substantial rain on Sunday, so USACE opened the dam up to 350 cfs for three days, the lake came up to a useable level, and he was able to get his boat off the lift. Dennis Bengtson said that we need to remember that USACE's number one purpose is to protect the dam and then to pay attention to the results downstream. Ken Ormsbee stated that our spillway is currently in need of maintenance and is 8.5" lower than what the original permit drawing elevation specified for the top elevation of the spillway, which controls the BPL's low water level. Lindsey responded, saying that at 33 cfs outflow from the USACE dam, we want our new dam to be able to minimize its outflow so that it doesn't continue draining through the spillway as it currently does. The modeling SEH performed included a range of elevations to better understand what flexibility we would have with varying inflow quantities with a sheet pile weir structure versus our current dam. The modeled elevations won't be exact until we get to the final design, which we wouldn't be certain of until a DNR permit is issued.

Bill Werb asked how long would it take to build a dam like this and Lindsey replied that it would take one construction season/one summer. A question was asked about how solid is the existing rock dam is and if it could it blow out next week. Richard Rammer answered by saying that it could collapse, especially on the east side. If you walk over the spillway when it's passable, take a poll and go to the east end. You will feel it give and hear that it sounds hollow, and if you look downstream, there is a big pile of sand that is washing away from underneath it. If we don't do something, we will probably lose half of our dam from the rocks collapsing. Ken Ormsbee reminded attendees that there is an album located in the back of the room that contains historic photos from the original construction and advised attendees to observe the quantity of earth that sits underneath the rock. That earth has been and currently is washing out. Richard stated that the reason it's not washing out on the eastern bank is that Holmvig placed big jersey barriers at the front of the dam last year. in his opinion, if the five barriers in the dam right now hadn't been placed there, that third of the dam would probably be gone by now. Dennis mentioned that Rob Hall stated earlier that we are working on a current maintenance initiative to address some of these issues. Some of these are fairly recent discoveries. For example, the

undermining of rock and the loss of earth and clay from underneath are new and separate issues that we are going to have to deal with, and one thing is a certainty--it will definitely cost money to fix. ***The bottom line and the main reason we are all here today, said Dennis, is that WE NEED A NEW DAM, folks!***

Suzanne Moline commented somewhat emotionally that they've lived on the North side of BPL for 11 years that they have a 30 foot dock and a 4 foot ramp, and for a month they've had NO water under their dock. Suzanne said she realizes that they live in a shallow part of the lake, but all they have is MUCK for 6 feet. Their main concern is fixing the lowest elevation of the spillway so that they would at least have a foot of water. Ken Ormsbee suggested that if we went around the room that there would be numerous similar stories since even on the south side, the water level is very low and that there appear to be a few boats marooned on lifts. Ken personally had his boat stuck on his lift for two months last summer. ***Dennis commented that some of us are concerned about low water level and some are concerned about high water levels, but that as a BPLA board member he is concerned about both issues, as are his fellow board members and we are all trying to fix the problems***.

Lindsey said that SEH had already edited the feasibility study, added the data Dennis provided, and that it should be finalized soon. Once finalized, the report will be posted to the BPLA website so that information is available to everyone in a central location. Tom Altier asked what the next steps and time frame are. Bill O'Brien answered that we've just solved the first big road block in that the feasibility study SEH is completing is an essential starting point. Once it is complete and an initial design has been selected, we can begin exploring funding options in earnest. We began talking about this last year and CWC came through, providing $17,000 to initiate the feasibility study. We had three engineering companies compete for the study with formal proposals and following review and analysis from Rob and his team and the BPLA board; SEH was selected. SEH compared six different dam designs and narrowed the most viable design options down to two that would best fit our needs. Rob Hall and SEH put together what was presented and discussed at the meeting, which is a working document. Rob said that we are near the end of the planning phase, so our next step is to take the planning study and beating the drum for funding. Once some level of funding is secured, we would move to the design and permitting phase.

A question was asked about the difference between rock and concrete structures. Lindsey commented that a concrete structure would be about $200,000 more and that with concrete, you pay more up front but the maintenance is less costly. Ken Ormsbee mentioned that we did have a teleconference discussion wherein the differences between Option 4 and a concrete version were discussed. From a maintenance perspective the cost was almost identical, with the only real difference being a slightly

longer life span with concrete. Dennis commented that the study says the concrete version requires maintenance less frequently but is more expensive to repair. Sheet piling is less expensive to repair, but may require more frequent maintenance. Lindsey stated that they couldn't really determine exact maintenance costs until SEH understood more about the local availability of items such as equipment and quarry rock. Dennis mentioned that although there isn't an exact projection of long-term maintenance costs, that Rob described repair and maintenance events that have occurred over the years and how much they cost. We are all confident that a new dam will require significantly less expense than what we've been incurring.

Jim Perske asked if any of the funding for a new dam would come from SSD funds. Ken Ormsbee described a worst-case rough order of magnitude cashflow analysis that he had performed. Ken's assumptions were as follows: Option #4 assuming a total cost of $750,000 bond-financed by CWC over a 20-year amortization period at a 5% interest rate. The annual debt service amount was assumed to be spread between 100 landowners with $200 per year per landowner added to cover long-term maintenance costs. Given these assumptions, the total annual cost per land owner over a 20-year period would total $500 per year. Only $300 per year more than we are currently paying! These numbers include no grant funding whatsoever. It is unlikely that no grant funding would be available and a 5% interest rate is a high rate today for tax-free municipal financing.

A question was asked about grant funding. Lindsey answered that SEH engages a consultant, Heidi Peiper, who searches for grants and is the specialist who will actually meet with the grant providers. The final study will list a range of possible sources and it will even score how the grantee's criteria aligns with our project. When preparing grant applications, it is recommended that we highlight project benefits that align with DNR preferences such as erosion control and prevention, loon habitat improvement, and danger to our eagle's nest. Once Heidi understands the timing requirement for funding, she will identify various grant sources and assist the BPLA board in preparing applications. Higher priority criteria in qualifying for state bonding can be factors such as risk of life, loss of property, and hazard levels associated with our dam. The positive of this project is that in relation to other funding requests, ours will be on the low side. Some grants are matching grants while others target a certain percentage of the total funding amount. Dennis mentioned that Section five of the final report is all about funding and will include information regarding possible sources and how our project might score in relation to various grant criteria.

Lindsey commented that input from today's meeting on the forms that were handed out is intended to become part of the final version of the study. Bill stated that as soon as the study is finalized, it will be posted on the BPLA website at http://www.bigpinelake-crosslake.com/. Someone asked when we

would find out if grant funding is available. Ken felt like we'd be looking at a three-year process to get to construction due to cycle-times related to permitting, grant writing, and bonding. Once the funding is established then you can apply for permits and the final design. Or if incremental funding is established, design development and permitting can be done in advance of full funding.

Someone asked what would happen if the dam washed out or collapsed as Richard described. Would we just repair it now? Bill answered that doing so is all we can do right now. He added that Rob Hall is working on that repair with Holmvig this year and is trying to stay on top of it. Rob Hall stated that if he proceeded with fixing a repair when we didn't have adequate funds in the SSD account, we would have to go before CWC board and make a request advanced funding until the SSD is adequately funded to repay the "loan" value. Rob said that 60% of the board members are up for re-election, so they might be more willing to approve an advance. Richard Rammer stated that the CWC board has stood up for us since we stepped-up the SSD to $200 per landowner and that they realize we are concerned and are taking responsibility rather than just looking for free hand out. Rob Hall added that he thinks this will also help us in the long term when applying for grants since it demonstrates that BPLA making a good faith effort to resolve the situation by funding as much of the cost as we're able. Dennis Bengtson stated that the BPLA board's current focus is to get that minimum level up so we don't have boats on dry lake bottom, by addressing the spillway elevation issue and that we are just now working to better understand more about the undercutting issue.

Lindsey asked that BPLA members fill-out the questionnaire form that was handed out that they be submitted next week by email, fax, or U.S. mail.

No more questions were asked. Speakers were thanked and applauded and a 5 minute break was called for. At approximately 11:30 our speakers gathered their items and left.

At 11:34, BPLA Secretary, Terri Rammer, called the Business Meeting portion of the Annual Meeting to order

Bill O' Brien, Vice President, introduced each board member with their titles and the number of years they served on the BPLA board. Bill stated that last year's minutes were handed out with the agenda as well as the treasures report, so neither will be read for approval so that we have more time to deal with other important matters.

Bill raised a motion in favor of approving last year's minutes. Bill Korchik 1st and Todd Strobel 2nd The vote resulted in unanimous ayes.

Bill raised a motion in favor of approving the treasurer's report. Pam Werb 1st and Dave Hughes 2nd. The vote resulted in unanimous ayes.

Richard Rammer reported on old business and explained that he and Dave Rudberg do a test each month for water clarity which is the secchi disc test and phosphorus test on our lake.

- The NO WAKE policy is put in place during times of high water for respect to the shoreline erosion. Unfortunately, when we put the signs up they were stolen. Even without signs up, if the water is high, everyone using the lake should not make a wake.
- For floating bogs, simply call one of the board members and we will stake them down. Please do not push them down to the dam or to the middle of the lake, because with the way our lake flows and the wind blows, they will eventually float down to the dam. Bogs are protected by the DNR, so you do need a permit to move them and they do have a purpose in the eco system, which is that they help clarify the lake naturally. In the past, the BPLA board has acquired the permit and posted it on the BPLA website.
- Do not remove the rocks from the dam, so do not hesitate to call the cops if you see someone removing rocks or if you someone camping. Remember the web site to seek information (www.bigpinelake-crosslake.com). Removing your name sign if you sell your property, just let us know and you can take it with you.

Annette Jackson stated that she would like to go back to every other weekend for mosquito spraying and get every holiday covered since this year's applications missed two major holidays.

Ken Ormsbee reported on new business stating that there was a suggestion to hold a 4th of July boat parade on BPL that would end at Bill O'Brien's beach for socializing. Ken asked for a show of hands for interested parties and several hands were raised.

We had a motion from the floor for appreciation and recognition of Nancy and Dave Rudberg's hard and terrific work. Randy Young 1st and Dave Hughes 2nd All in favor say "aye" and everybody did with no "nays". The vote resulted in unanimous ayes. Dennis Bengtson suggested that we act on that vote immediately by displaying three engraved recognition plaques and reading the inscriptions for each person recognized. One was for Nancy Rudberg as outgoing president, one for Dave Rudberg as outgoing Treasurer, and the third was presented to Bill O'Brien as the outgoing vice president. Everyone applauded.

Election of Directors was the next agenda item, which was facilitated by Bill. He stated that there will be 3 positions opening up. Dave Rudberg's term is complete and he does not wish to seek re-

election. Nancy Rudberg has one year remaining on her term, but she elected did not want to finish her term and she notified the board last year that 2014 was going to be her last year. Bill O'Brien's term is up and he also is not seeking re-election. Richard Rammer's term is up and he is seeking re-election. So, there are 4 spots and we currently have 4 nominees. The audience was encouraged to bring forth any nominees they might like to volunteer. No other nominees were offered.

Bill O'Brien nominated Richard Rammer and spoke on his behalf providing a brief history of Richard's involvement with BPLA. Bill stated that Richard and Terri have lived on the lake for 16 years and has been on the board for 10 years. Richard maintains the name sign and makes new individual name boards, helps remove bogs from the dam, and has been at CWC and SEH meetings. He has also helped Dave Rudberg do monthly water clarity tests on the lake.

Dennis Bengtson nominated Pat Zulkosky, stating that Pat and his wife, Shari, have been on the lake for 12 years and that Pat is the owner of his own business. Pat is here practically every weekend and has expressed a lot of interest in serving on the board.

Ken Ormsbee nominated Bill Korchik, who is here with his wife, Ann, and been on the lake for 4 years. Bill recently retired from the U.S. Department of Veterans Affairs as the Medical Director of an eight-state region, but that Bill still works part time for the State of MN. Richard Rammer nominated Tom Veeninga, who has been on the lake for 16 years, retired from United Airlines, is interested in the care of our lake, and also has volunteered to remove bogs. Attendees were encouraged to speak-up if they'd like to run for one of these positions or nominate someone else. No one volunteered and show-of-hands votes were taken for each nominee. Total votes were as follows:

Bill Korchik – 17; Richard Rammer – 19; Pat Zulkosky – 18; Tom Veeninga – 15; It was announced that those elected to the BPLA board for the next two years were Richard Rammer, Pat Zulkosky, and Bill Korchik. We already agreed who ever came in fourth (Tom Veeninga) would be appointed by the new Board to finish Nancy's term and be up for election in 2015. Bill stated that directly after the conclusion of the 2014 annual meeting, a board meeting would take place with the new officers in attendance and that board members would be elected to new positions.

Bill asked for questions or open issues.

Pam Werb asked landowners would be informed of next steps and ongoing updates following the annual meeting. She mentioned that we are very good at sharing information at the annual meeting, but not as good on an ongoing basis. She asked if we could provide a quarterly BPLA website update. Ken Ormsbee answered by committing that a quarterly update would be posted to the website, even if there's nothing to report. Ken stated that he, Dennis and Terri would be receiving training on

website management from Richard and Terri's daughter. Dennis Bengtson reminded attendees that we need everyone's email address so we can get urgent information out to people. When Dennis was working on the BPLA presentation for the kick-off meeting for the feasibility study, he wanted to gather input from everyone, but had only 30 valid email addresses out of the 100 property owners.

Bill called for more questions and none were offered. Bill motioned to adjourn the meeting; Bill Werb 1st and Anne Korchik 2nd. Show of hands; everyone in favor.

Meeting adjourned @ 12:00 pm

Notes prepared by Terri Rammer, BPLA Secretary, and edited and posted by Ken Ormsbee.