

Conservation Commission Minutes, 08/04/2016

Lenox Conservation Commission Landuse Meeting Room August 4, 2016 Minutes

Members present: Chair Neal Carpenter, (NC); Vince Ammendola, (VA); Tim Flanagan, (TF); Joe Strauch, (JS); David Lane, (DL); Dick Ferren, (DF); Rose Fitzgerald Casey, (RFC)
Staff present: Peggy Ammendola, Land Use Clerk (PA)

Laurel Lake Preservation Association 2015 Drawdown Report

Present was Dr. Ken Wagner of Water Resource Services and the following residents who live at Laurel Lake:

Ray Grogan
Judith and Ruth Bronston
Dan and Madelyn Hajjar
Roger Scheurer
Harold and Denice Sherman

All Commissioners were given a copy of the 2015 Drawdown Report in advance of this meeting.

Dr. Wagner said that this was the sixth year of monitoring and the report is a five year summary. At the end of the report he included 50 or so conclusions. In summarizing his report he stated that the findings show that there has been no major shift in vegetation. There has been a natural variability, e.g., some years better, some worse, but generally stable. Regarding the buildup of phosphorous, he finds that it is not as severe as in other places, and generally in good shape. The two problems with Laurel Lake are the invasive milfoil and the zebra mussels, with the latter having center stage. Dr. Wagner said that Laurel Lake is the only lake in Massachusetts in which zebra mussels have been found. The state has more power now than previously to require boat washing, but often the facility isn't staffed.

Dr. Wagner states that the major thrust in treating lakes for these problems are drawdowns. He provided to the Commissioners a map which laid out the habitat of the mussels and his conclusions. He detailed the zones defined on the map and the effects of the drawdown. Dr. Wagner claims that there are two solutions to ridding the lake of the zebra mussels. One would be to treat the lake chemically using a copper solution which he feels would be opposed by Natural Heritage Endangered Species Program and the other would be a one week, 30 foot drawdown. In the 2015 Drawdown Report, the result of an experiment of such a drawdown revealed a 100 percent success rate. Dr. Wagner said that when zebra mussels are exposed to air for four days they die. He said that the Lee Conservation Commission was receptive to the drawdown. He asked the Commissioners to consider his proposal for the drawdown and for their approval of the monitoring proposed in the report.

JS feels that the Commission has gone as far as they can go and that this matter is a problem for the state to handle. Dr. Wagner agreed that the state should be responsible, but so far they have not accepted responsibility.

Dr. Wagner said that the state would not take any responsibility for the invasive species and contested the status of the endangered snail. He argued that the snail should not be on the list and that the Commission shouldn't be concerned. JS asked what the effect of the drawdown would have on vertebrates. Dr. Wagner implied that the state has never done a survey of the fish in the lake.

VA questioned the feasibility of drawing down to that depth. Dr. Wagner said that they would use pumps and that there would be substantial volume remaining to hold the fish. The drawdown would take place in early to mid-December and over the course of the winter the lake would refill.

NC stated he was concerned about the harm that would be done by a 30 foot drawdown. Dr. Wagner conceded that it would wreak havoc on aquatic organisms, but it will not sterilize the lake. Dr. Wagner said that it would take 1 to 2 years to recover. VA asked about the possibility of spreading the mussels through the process of pumping the water from the lake. Dr. Wagner responded that at that time of the year the veligers are no longer active. He said that he needs the Commission to think about his proposal and give a response and if they do not support the idea of the 30 foot drawdown he would like to have reason/reasons. "Otherwise," he said, "we're stuck."

RFC expressed her concern with a drawdown if the lake is already low. Dr. Wagner said that they would take into consideration the forecasts.

Drawdowns are frequently done at lakes for dam repair in the summer months and the lakes recover. He agreed that a drawdown of this degree would have major impacts, but he believes that they would be worth it to eliminate the zebra mussels. DF suggested that perhaps the state should be approached with this suggestion first as it might help the Commission in making a decision. Dr. Wagner responded that the Commission should act independently to solve the problem under the WPA. He feels that this is dramatic approach and this has never been done in Massachusetts that he is aware of. He fully expects the state would not approve without the Commission endorsement.

VA asked about the natural progression if there were no drawdowns, suggesting that the zebra mussels would have taken all of the nutrients out of the water and would ultimately die. Dr. Wagner disagreed. VA felt that a management plan to stop the nutrient influx from the surrounding farmland could help. Dr. Wagner opined that nothing could be done with the watershed that would prevent the zebra mussels and without the drawdowns the entire shoreline would be covered by the zebra mussels. With a drawdown of five feet, they would be getting two thirds to three quarters population control at seven to eight feet. He recommends the 30 foot drawdown. He argues that there is mandate to protect the aspects of the environment, but there is no mandate to get rid of invasive species. Dr. Wagner said that he is not suggesting that the Commission approve, but asked if it is something that can be seriously entertained. He wants the Commission to discuss and take time before making a decision. He suggested that a condition to the Order of Conditions would state amount of snowpack necessary, temperatures forecasted, etc. He

said that calculations would be made on previous weather related figures. This would be a huge effort and before doing this, he wants to know if it is remotely possible to be considered.

NC commented that the wetlands are in Lenox, and that with a drawdown of more than 3 feet they would be affected. Dr. Wagner said that the wetlands will not be impacted in the winter because the soils are very tight here, not sandy like in the eastern part of the state. To his knowledge there is no documentation that a drawdown does damage to the wetlands in Berkshire County.

JS asked if the proposed 30 foot drawdown would result in the zebra mussels being diverted to the Housatonic River. Dr. Wagner said that so far they have not been detrimental to the Housatonic River, but they are in a few lakes in CT.

JS asked Dr. Wagner to provide the Commission with data that may be available from the studies Dr. Wagner referred to that is related to drawdowns that have taken place.

Dr. Wagner stated that no action regarding the eradication of the invasive species has serious consequences.

NC stated that only one more drawdown, limited to 3 feet, is permitted under the current Order of Conditions. Any further requests would require a new Notice of Intent. He also said that the Commission has continually asked for a management plan that is stated in the Order of Conditions and is required by the state but that it hasn't been forthcoming. Dr. Wagner argued that it has been provided in one of the reports, either the 2012 or 2013 report. He said that he would research and email the plan to the Commission. NC said that the Commission hasn't been given information that the plan is within a report, and questioned why, when the Commission has repeatedly asked for the report, that hasn't been pointed out. JS asked that Dr. Wagner "plan a plan for a plan", e.g., listing things that need to be done etc. TF said that the plan needs to be a separate document. Dr. Wagner said that he didn't feel that he could trespass on properties to get samples and the Commission could not enforce that. He said that he could put together the information the Commission wanted, but questioned the need to spend the Association's money when it is not the Commission's responsibility or jurisdiction. JS said that a plan could possibly be given to the Board of Selectmen.

RFC said that she feels that the request goes beyond the Commission's authority. She would like to have information from others who have done a drawdown of this magnitude and how did it affect the entire lake and the property owners. Harold Sherman responded that more than just the homeowners benefitted from the use of the lake. RFC is concerned that the lake would not refill. Dr. Wagner responded that for a while there would be less amphibians, reptiles, invertebrates, birds, and growth of aquatic vegetation etc., for a period of about two years.

Ray Grogan commented that doing nothing is not a solution to a major problem. He said that the zebra mussel is changing the ecological system of the lake and he is convinced that the drawdown and the boat monitoring have stopped the spread of the mussels as they have not been found in any other lake. He feels that Laurel Lake, at about 170 acres, is a manageable size for a drawdown, and even though it has not worked every time, it is possible it could work.

JS asked if a drawdown that is proposed would do any structural damage on the shore. Dr. Wagner said that there are coarse substrates around the edge which then goes into sand and then silt. He doesn't think the substrate is going anywhere. He added that there might be some slumping in the deeper water. JS asked if the removal of the water from the lake would dewater the substrate and if that could cause slumping and sinking. Dr. Wagner said that it doesn't happen in the Berkshires as the soils are too tight and don't dewater. In the winter it would be frozen. He said that it could happen, but the risks are low. He concluded that Laurel Lake doesn't have much peripheral wetland, so he sees no significant impacts.

Dr. Wagner asked for feedback over the next few months. He wasn't trying to sell this drawdown to the Commission, but wants them to feel that the end result would make it worth doing. If the Commission doesn't feel that way he would accept that decision and would know that they cannot proceed in that direction.

DF said that the Commission doesn't have the power to approve the plan. Dr. Wagner said that before they file an NOI, they would have to get approval from NHESP. If by chance NHESP approves, Dr. Wagner wants the Commission's assurance that they would agree as well. Dr. Wagner, instead of a drawdown, asked that the Commission consider allowing the use of copper for eradication.

Notice of Intent, Oliver Curme, The Dormers LLC, 138 Pittsfield Rd., Map 22 Parcel 32. The proposed project is the dredging by suction of a small pond in buffer zone to bordering vegetated wetland. DEP File number 198-0293. Continued from July 7 and July 21, 2016.

Present were Shannon Boomsma of White Engineering and Mr. Curme.

Ms. Boomsma presented a letter to the Commissioners dated August 4, 2016 in which she addressed the interests of the Massachusetts Wetland Protection Act. She reviewed the letter with the Commission. She said that this project meets the performance standards of the Land Under Waterbody regulations and that within 2 years the wildlife habitat in the impoundment will be returned as the vegetation starts to grow and the normal process of when organic materials start to decompose.

Ms. Boomsma included in her letter statements of Mark Amler of Pristine Waters LLC, the individual who will be doing the work. In the letter he explained how the sediment loads were measured and stated that the pond has a bottom of rock and clay which will remain intact. He described the project as more analogous to a restoration effort than it is to traditional dredging. Based on the information Mr. Amler gave to Ms. Boomsma, she has noted on the plan a general idea of the amount of water in the pond based on his readings of sediment information on depth of pond at six locations. She discussed the depth of open water and the depth of the sediment at some locations and stated that when the work is done they don't expect the water level to be less than four feet.

NC said that it appears that all of the questions have been answered and he didn't have a problem with the project as presented. He stated that he spoke to Mark Stinson of MassDEP who advised the Commission to refer to the regulations, but Mr. Stinson didn't have a problem with the

project. Ms. Boomsma added that Mr. Stinson had sent an email in which he clarified that this is a pond by definition under the Wetlands Protection Act, as it is the headwaters of an intermittent stream. VA added that he understood that the pond could possibly be used as fire suppression. Mr. Curme said that the Fire Chief told him that given the location of the fire hydrants on Routes 7 & 20 they would like to have a dry standpipe somewhere on property because the pond would be an option. That work is not being proposed in this application and Mrs. Boomsma said that in order to do that it has to be determined whether the pond has enough capacity.

TF, looking at the depth information provided on the plan, said that he had asked for bathymetric information before and after the project is complete, so he questioned how the dredge operator would know how much material to extract and what could be predicted about the shape of the bottom and volume of the pond after the procedure. Ms. Boomsma said that would be up to the dredge operator to stay within their allowable limits and to calculate that material removed. As far as not doing bathymetric measurements, she said that is a requirement if this was a "pond", but it is not classified as such. TF asked how the Commission would know if the work is done correctly if there was no proposal to show the intended shape of the pond after the project is complete. He believes that it makes a big difference biologically in terms of aquatic habitat.

DL does not believe that those calculations could be determined. Ms. Boomsma suggested that a condition be added to the Order of Conditions that the company provides information as to how much material was removed. She said that floating mass and some of the sediment will be removed, not just in one place all the way to the bottom. TF said that in the regulations the muck and aquatic material are part of the wildlife habitat and they serve the public interest in terms of wetland protection. This is what Mark Stinson of the DEP has asked the Commission to refer to. Ms. Boomsma argued that this was not necessary because this is not a pond. TF responded that it is land under water and it has been determined that this is a resource area. He does not see how the project as proposed meets the performance standards in terms of the threshold for disturbance for land under water. This, he said, is why the bottom contours before and after is significant and also why a habitat evaluation is needed. Ms. Boomsma responded that with the way the pond is situated and with material coming off the hillside and the amount of vegetation that is hanging over the pond, the wildlife habitat will not be damaged. She believes that within two years there will be more of this material that will be it will be back in the pond. TF argued that there is no data to support that claim and pointed out that Pristine Waters LLC makes no representation to the length of time before vegetative growth will commence and to what extent. He concluded that if Pristine Waters LLC doesn't know, he doesn't know how Ms. Boomsma can make that assertion when there is no species list or wildlife habitat evaluation. He said that without this data, the Commission would not know if alteration has occurred or not in two years.

NC called for a motion.

DL made a motion to accept the project as presented. RFC seconded the motion and the Commission voted to approve 4-3. TF, JS and DF did not approve.

Other business: NC said that he has spoken to Doug Bruce of BNRC about filing an NOI regarding trails at Parson's Marsh. This would later in the year, so a site visit will be scheduled soon in order to see the area while weather conditions are favorable.

Approve Minutes: July 21, 2016-RFC made a motion to approve the minutes as amended. JS seconded the motion. The Commission voted to approve 7-0.

RFC made a motion to adjourn at 9:12 PM. DF seconded the motion and the Commission voted to agree 7-0.

Respectfully submitted,
Peggy Ammendola