Minutes of the Lake Hopatcong Commission Special Meeting January 31, 2011

A special meeting of the Lake Hopatcong Commission was held on January 31, 2011 at the Roxbury Municipal Building, 1715 Route 46, Ledgewood, New Jersey. At 6:08 p.m., Chair Felter called the meeting to order and stated that the meeting was being held in accordance with "Open Public Meetings Act."

Salute to the Flag: Chair Felter and all those in attendance joined in a salute to the flag.

Roll Call:

Present: Betty Lou DeCroce, Daniel McCarthy, Kerry Pflugh, Joel Servoss

(6:30), Barbara Kinback (Roxbury Alternate), Edward McCarthy (Morris Cty Alternate), Richard O'Connor (Mt. Arlington Alternate),

Chairman Felter

Absent: Tom Foley, Elizabeth Gantert, David Jarvis, Richard Zoschak

With seven members present at Roll Call, Chair Felter declared a quorum.

The chair stated it was a special meeting of the Commission and a public information meeting which the Commission facilitated. It will be presented by the New Jersey Department of Environmental Protection ("NJ DEP" or "Department") to discuss the Lake Hopatcong Water Level Management Plan (LHWLMP). He stated everyone wishing to speak will have two minutes to speak and should sign-in to speak. The DEP will make a presentation and then they will entertain questions from the Commission and then from the public. He stated there should be nothing personal in nature and if it does occur it will be stopped immediately. After hearing from the DEP representatives there should be a better understanding of the plan.

The Chair stated the Commission would address two resolutions first. The resolution were previously distributed to the Commission

Resolution 11-01 Setting Time and Date for 2011 Regular Meetings

Chair Felter stated Resolution 11-01 was to set the time and dates for the regular meetings. Ms. DeCroce moved the resolution and Mr. D. McCarthy seconded. There being no comments, the Chair requested a roll call vote.

ROLL CALL:

DeCroce	Yes	Kinback	Yes
McCarthy, D.	Yes	O'Connor	Yes
Pflugh	Yes	Felter	Yes
McCarthy, E.	Yes		

Motion unanimous.

Resolution 11-02 Designation of Official Newspapers

Chair Felter stated Resolution 11-02 was to designate official newspapers. Ms. DeCroce moved the resolution and Mr. D. McCarthy seconded. There being no discussion, the Chair requested a roll call.

ROLL CALL:

DeCroce	Yes	Kinback	Yes
McCarthy, D.	Yes	O'Connor	Yes
Pflugh	Yes	Felter	Yes
McCarthy, E.	Yes		

Motion unanimous.

Overview of Lake Hopatcong Water Level Management Plan – NJ DEP

The Chair turned the meeting over to Larry Baier of NJ DEP. Mr. Baier introduced himself stating when he started the project he worked with the Division of Watershed Management, but is now with the Bureau of Land Use and Coastal Compliance and Enforcement. He introduced other DEP representatives:

Jeff Hoffman, New Jersey Geological Survey (NJGS) Jan Gheen, Division of Water Supply Helen Maurella, Division of Parks and Forestry Pat Hamilton & Lisa Barno, Fisheries Biologists, Division of Fish and Wildlife (F&W)

[A summary of Mr. Baier's presentation follows.]

The last time the plan was updated was in 2000. In 2008 there was a regular five year, five foot drawdown. In spring 2009, there was great difficulty recovering the lake level. The Department was sued by business owners, now known as the Lake Hopatcong Alliance (LHA), although they might not have been known as that at the time. As part of the suit settlement, the Department agreed to re-visit the 2000 water level management plan and to convene a Citizen's Advisory Committee (CAC) to assist the Department in reviewing and updating the plan. The CAC membership was comprised of representatives from the Lake Hopatcong Commission (LHC or Commission), Lake Musconetcong Regional Planning Board (LMRPB), representatives from each of the four towns surrounding the lake, the LHA and the Musconetcong Watershed Association (MWA).

In 1922, the legislative branch directed the Department to use Lake Hopatcong as an aquatic park and to maintain the lake level at the normal high water level, natural conditions allowed. In 1922 there was also a court order from the Musconetcong Millers' Association which directs that a fountain be constructed to pass 12 cfs out of the lake downstream at all times. The Department has to balance the two mandates and cannot meet both.

Goals for the plans were to protect the environmental health and natural and scenic resources for Lake Hopatcong and the Musconetcong River System, maximize recreational opportunities, minimize the potential for damage to property and waterfront structures and maintain the minimum flow required to sustain downstream.

The court order is a non-published decision, but there are historical documents that reflect the decision. Most recently the United States Geological Survey (USGS) furnished the Department with a March 1, 1923 letter from Oliver Hartwell of the USGS to Mr. Critchlow, Department of Conservation and Development, DEP predecessor. It indicates the requirement to pass 32 cfs for eight weeks during the year and 64 cfs during the remainder of the year at Saxton Falls to operate river mills. USGS calculated the ordinary year dry weather flow at 4.8 cfs per sq mile of drainage which equate to about 12 cfs at Lake Hopatcong.

Before the letter was discovered, NJGS was asked to provide what the Musconetcong River Basin would look like if Lake Hopatcong was not there. Is 12 cfs too high or too low? A study comparing the adjacent Rockaway River basin which does not have a lake took the same square mileage, similar geology and land use patterns and found that 12 cfs was in the ballpark. The study is available on the Department website under the NJGS webpage. A breakdown of the water budget for the summer month was provided. In the plan he overstated the amount of evaporation because pan-evaporation data was used which is about 6" of evaporation. NJGS indicated pan evaporation overstates and lake evaporation is about 75% of it so the lake loses about 4-1/2" through evaporation. The 12 cfs equate to about 3.6". In an average water year the lake is basically in balance which tells them that 12 cfs is about the right number.

The objective of plan was to establish an easily understood management and operational guidelines for manipulation of the lake's water controls. The goal is to maintain an elevation as near to 9 feet as possible between May 1 and November 19, conditions permitting. Concerns around the lake and downstream include lake navigation, no-wake conditions and preventing ice damage. The dam control structures were reviewed including the operations of the dam fountain, gate house and how staff has to adjust the structure. The dam control structure it is not very precise to control the lake level adjustment. USGS lake level and outflow gages have a time delays of approximately half an hour. Mr. Baier showed a picture of the Stanhope building that spans the Musconetcong River. The building regulates how quickly adjustments can be made to drop the lake level to preventing flooding this building and another building nearby. There is control over lowering the lake, but there is not good control over raising the lake because it requires rain to raise the lake elevation. Below Saxton Falls, the Musconetcong is a wild and scenic river designated by the National Park Service. Waterloo Village has mills owned and operated by Division of Parks and Forestry and water flowing through the raceway to operate the mills is needed for historic interpretation. The Musconetcong Sewage Authority (MSA) outflow is upstream of Lubber's Run and the Lake Hopatcong drainage area makes up about 80% of the available dilution available in the river. At the Lake Musconetcong dam it is about 86% based on the drainage area. MSA outflow is a concern because it relies on dilution in the Musconetcong River to set its effluent limits. If less dilution is available, more strict effluent limits would cause sewer bill to increase. Effluent limits were provided in more detail indicating 6.8 cfs is what is required at the location to avoid ammonia toxicity. The most critical segment is between the two lakes because Lake Hopatcong makes 100% of the river's flow in this segment which is trout maintenance and is trout-stocked by F&W. The food chain and trout production was described and how it correlates directly with water temperature.

The plan did not change the passing flow of 12 cfs which is about the right number. Changes in the 2011 plan are if 12 cfs is spilling over the top of the dam, the gates will be closed to hold back as much water as possible, but still manage the level to avoid water level reaching 9.5 feet to stay away from the no-wake declaration. If water is needed for human consumption in drought conditions, all bets are off. In the 2011 plan, if the lake is below one foot below normal, the Department would begin to at least look and see whether or not the flow out of the lake could be reduced. It does not say if it is a foot below it will be done automatically. This was done in spring 2009 when the lake was having difficulty in recovering and in September 2010 the outflow was reduced but not until F&W collected a number of sampling points and were comfortable to reduce outflow without harming biota particularly in the 1-1/4 mile stretch. It would be foolish for the Department to issue a plan that did not recognize this, since in the last two years, this was done twice.

After much debate, the CAC left the annual drawdown at 26". The start date was changed from November 1st at of rate of 3/4" daily to complete the drawdown by December 15. To extend the lake boating season, the rate was increased to 1" daily to be completed by December 15 and will start on or about November 19 depending on where the actual lake elevation is. There was difficulty this past fall when this was done. On December 1 there was approximately 2" of rain which caused the lake level to increase. The building downstream was a restriction on how fast the lake could be dropped so the target was missed by a day or two. Division of Parks and Forestry did an excellent job of managing it, but it will have to be looked at because of the past year's experience. The refill will no longer begin on March 15, but will be based on ice-out. The Department will not raise the level if there is hard ice which causes damage to waterfront property structures.

CAC had lengthy discussion about 5' drawdown, but it will remain. By increasing the drawdown rate from 1" to 1-1/2" daily, it will give another two to three weeks depending on when Labor Day falls. Lowering 1-1/2" daily will be pushing the limits. The fastest the lake can be dropped because of the downstream building is 2.6" daily. The refill procedures were changed to closing the gates on December 15 to refill as much as possible until there is hard ice or it is within 26" which is the annual normal drawdown.

Most of the changes were to remove ambiguous statements and to include easy to understand management guidelines into the plan.

Commission Discussion

The Chair indicated the Commission would start with questions beginning with Mr. D. McCarthy. Mr. D. McCarthy indicated he did not have any questions, but concurred with Mr. Baier that a lot of time was spent on the plan including a lot of debate. There was extensive discussion on the amount of the drawdown and the timing of it. He would like to know where the 1922 court decision is and would like to find it. His other biggest concern is to make sure the plan is followed as was not the case in the 1980s and two years ago. He stated it is a comprehensive plan and it will be fine tuned when the CAC meets again in a year. He said it is not etched in stone. Mr. Baier stated the plan indicated the CAC will meet annually to review past experiences and make needed adjustments. Mr. Felter stated if the plan is deviated from there will be notification to Commission and other organizations. Mr. McCarthy discussed the need to pass on their knowledge when staff retires or leaves.

Mr. Servoss stated his concern was the reaction time if the lake is down one foot and a decision is needed to close the dam and how the decision will be arrived at. He does not think the plan addressed it. Mr. Baier stated the plan indicated who is responsible for making those calls. He stated the ideal was to be able to be responsive and if they see a problem coming, they can start ahead of time. He stated he will have the CAC meet to figure out when it rains and the level picks up how to address it. That is missing from the plan.

Ms. DeCroce questioned why the plan indicated that the LHC and the LMRPB are the only organizations notified when the plan is deviated from. Mr. Baier stated it is not logistically possible for the Department to contact all necessary parties, but it needs to be done and would ask the Commission to do this by posting on its website.

Ms. Kinback stated her concern is the manipulation of the gates and if they need to be closed there will be human failure again in closing them. She stated in the past the DEP Commissioner

was very slow to react. She wanted assurances on what could be done to expedite and insure there is no human failure. Mr. Baier stated he was unsure how you guard against human failure. A prescribed action plan is there for the people that operate the dam and he expects they will follow that plan. The protocol for the Park staff is to check the dam in the morning, adjust accordingly and do the same at the end of shift.

Mr. E. McCarthy thanked those involved for working together in the spirit of cooperation. He stated the plan refers to communications on page 31-36.

Mr. O'Connor stated the plan is a good start and should be given a chance to see how people operate the gates. Next year at this time we will know better.

Chair Felter introduced Beth Styler-Barry (seated on the dais) that he asked to join the Commissioners tonight although it may have upset some. She is the Executive Director of the MWA. The Chair stated the lake does not stop at the dam and many do not share that opinion. There will be continued dialog with Ms. Barry and other groups. Ms. Barry thanked the Chair for asking her to join them tonight and has asked if the MWA could join the Commission so communications can remain at this level. She was directed to ask any questions and read her statement later. She stated, with respect to notification, her recommendation would be to include the MSA, LMRPB and MWA when the Commission is notified. The MWA has ability to notify all the way downstream. The Commission is should update its website or send email. Ms. Macalle-Holly stated she made it clear at the CAC, but re-iterated for the public that is not familiar with the Commission, that it is basically only one person at the office and she is not there 365 days. If there is something that occurs when she is not in the office, she does not have access to the Commission webpage. Ms. Barry stated there were many stakeholders that were not happy with the addition of the low water paragraph. Just because the plan was violated two years in a row, it is not the best way to handle the situation.

Chair Felter stated he received forty emails asking why the report does not address lake quality issues and asked Mr. Baier to address that. It was not addressed in the last plan and is not addressed in the current plan. Mr. Baier stated there are other water quality studies that have been done on Lake Hopatcong. There is a TMDL for phosphorus and a study done by Princeton Hydro to refine the study. Water quality issues are generally dealt with elsewhere. Most water quality issues deal with phosphorus which is the limiting nutrient in the lake. With lots of phosphorus, there are lots of weeds and algae. The dissolved fraction of phosphorus gets spread out evenly through the lake, but there are slight variations when you get in the smaller coves with lots of runoff that elevate the phosphorus concentration. Independent of how much water is let out the same amount of phosphorus is being let out. The Commission has done a lot of work trying to control the amount of phosphorus that goes into the lake and that is where the problems should be addressed. Mr. Baier stated the Commission's studies are good studies and are driving the Commission to do the right work.

Public Comment

Chair Felter opened the meeting to public comment.

Leslie Aughey, 107 Crestview Lane, Mount Arlington. As president of the Knee Deep Club he explained that the Club has been in existence for 65 years and the club is well known for taking the lead on important lake issues. The Club campaigned for Save the Lake 2000 which helped get the Commission it's funding and headed the water chestnut initiative. He stated the Club has

been deliberately silent during the two year escapade about water level. There is no significant issue and it has no great impact on water quality. Water levels do not have an impact on spawning fish. The Club is experts on the fishery and if there was anything wrong with the water level, the Club would be the first, as with all major issues in the lake, to work the issue. Water level does not have a negative impact on the lake's fishery. After closely reviewing lake level data over the past six years, the level went below 8 feet only twice and very late in the season. Five of those six years, the lake went over the high water level. He stated this is what happens in a natural lake and the lake is not a swimming pool.

Laurence Orlans, 257 Squaw Trail, Hopatcong. He has 47 years boating experience with 25 on Lake Hopatcong. He is in the Coast Guard Auxiliary and a certified boating safety instructor and licensed by the State. His comments are as a private citizen concerning boating safety on Lake Hopatcong. He referred to the LHWLMP and N.J.S.A. 13:12-5. He inquired if the DEP has an obligation to maintain its parks. Only one paragraph in the plan discussed the effects of low water levels on the recreational boating when boating will be severly impacted when elevation drops to 7.5 feet. The risk of property damage, injury or death can occur at levels much higher than that level. On August 1, 2010 while patrolling with the Coast Guard Auxiliary in River Styx, he struck a rock and seriously damaged his boat, but no injuries occurred due to their 5 knot speed. Boat damage was \$4.7K and the level was 8.5. He described what happens when boating accidents occurs at moderate and high speed and in many cases passengers are ejected from boats and can possibly drown. Since most passengers do not wear life vest, this will increase the number of drowning. He questioned if numerous boating accident will enable the Park Superintendent to override the plan in case of unusual circumstances. The plan does not provide for gathering this information to make those decisions. There are no regulations to reduce speed levels at low water levels and should the lake be closed to boating if the hazardous levels are reached. Another safety issue is how the low water levels will affect fire fighting ability of the fire boats.

The Chair indicated speakers would be given three minutes, based on the number of individuals that signed up to speak. He invited Mr. Aughey to return to finish his prepared statement.

Mr. Aughey stated many groups were involved in developing the plan over the year. The Club has read it and believes it to be a good plan. If the Club felt there was an issue they would have acted on it. Silence speaks volumes and the club has a long and proud history of protecting the lake. The Club's Board of Trustees, Directors and Officers are volunteers and do not have any financial interest or personal gain they receive from their efforts. In closing he stated to get past the issue and get back to more important issues at hand.

Ray Fernandez, Lake Hopatcong Alliance. He discussed appreciation for the efforts to arrive at greatly improved LHWLMP and being able to participate in the CAC. The LHA reviewed the plan. The LHWLMP does not pay much attention to N.J.S.A. 13:12-5 which requires the State to maintain the level at a specific level. The plan violates the requirements in numerous instances. The LHA requests the plan include greater methods to follow the law. The LHA suggestions the part of the plan be devoted to methods to permit greater adherence to the statute. If methods are not viable due to lack of research, affects or environmental assurances, he suggests a place mark be included in the plan to note it and DEP begin efforts to include management procedures. The LHWLMP plan is virtually silent regarding adverse water quality impacts resulting from outflow. The plan should include water level affects on water quality and how water management may facilitate improved water quality. It is environmentally irresponsible to ignore the impact water manipulation has on the lake environment and ecosystem. He suggests a section is devoted to

water level on water quality and if not currently available, a place mark be included in the plan for DEP to include in future revisions. The LHA does not support the definition of the minimum passing flow. The 12 cfs is arbitrary based on circumstances by the Miller's Association which is no longer in existence. There is no true scientific data that includes what impact this has on the water quality of stakeholders, most notably Lake Hopatcong. LHA has numerous issues with environmental focus and its violation of the statute. They have provided written comment. They recognize the plan is a great improvement to previous plans and does provide additional benefits for the lake. They will like all parties to continue to work together.

Steve Levinson, 77 Yacht Club Drive, Jefferson. He congratulated the DEP for putting together a good plan overall, particularly the interesting, concise summary. He is a licensed public health officer and licensed environmental specialist. He discussed his concerns regarding characterizations of water quality on the lake. Other than phosphorus there are other elements in terms of eutrophication of the lake such as the decrease in dissolved oxygen, acceleration of plant/algae growth that the drawdown affects water quality. He hopes the issue is looked at in terms of outflow of 12 cfs for the other environmental impacts from a public health perspective. He distributed a portion of the report prepared by DEP entitled, New Jersey 2004 Integrated Water Quality Monitoring and Assessment Report. He referred to the page of the report that refers to Lake Hopatcong. In Table 3.2, Individual Lake and Reservoir Assessments Results Using Bureau of Freshwater Fisheries Data has Lake Hopatcong identified as threatened and is listed as accelerated eutrophication. He is raising issues dealing with public safety in terms of recreational bathing and use of the lake. This should be taken into consideration.

Sandy Powers, 27 Winona Trail, Lake Hopatcong. She is speaking in favor of maintaining of the lake to a stable level of 9 feet. She lives in Bright's Cove, a shallow cove and it is a great fishing spot. Low levels affect them severely and those with permanent dock can not get safely out their boats and cannot swim in front of their property. The low levels increase the weed growth. When water goes down to far, they do no have access to the main lake.

Dick Hodson. Many of the projections hinged on the court decision of the 1920s. Since the suit is not available, it might be advisable to challenge that. He questioned, if not bound by that number, if there was something else, what would the plan be like.

Brian Cowden, 11 Kevin Drive, Flanders. He is on Trout Unlimited national staff. He stated the CAC was comprised of a diverse group of stakeholders and developed a solid proposal. The DEP inserted a low water paragraph to the draft LHWLMP. They have concerns over that because it could potentially override the decisions that the CAC reached and it can be an abuse for either side. They would like to see it removed and have the CAC draft approved as the Committee came up with removing the low water paragraph and to study the river's needs for ecological balance between the Lake Hopatcong and Lake Musconetcong.

Cliff Beebe, Beebe Marina. He has been on the lake almost 80 years. Lowering the lake is not proper. He is asking Mr. Baier to leave the lake alone. The forefathers made the rule for a purpose. The fountain was put in from a judge from Carteret because of an insulting plant downstream that wanted water and he was off base when he passed it. The State does not own the lake and never compensated anyone for it. He lost props and hurts boats because the water went out in the lake and hit rocks. They are denying his easements and he is denied the right to ingress and egress his property and he pays high taxes. It states if property rights are violated, they could be held personally liable. He referred to a document he distributed (US Supreme Court Judicial Rulings, State reps have no immunity under feds – Illinois Issues, June 1990). He

discussed his case with Judge Stanton and the Judge stated Mr. Beebe presented a lot of truth to the court.

Steve Gebeloff, resident of River Styx. The LHWLMP has always had a conflict between the Miller's order of 7.5 MGD and N.J.S.A. 13:12-5 that says keep the lake full. Although he hoped the plan review would clear it up, the DEP choose to inject a third document which reconstructed the steam flow in the Musconetcong River which compounded the confusion. It is being used as an argument to convince among other, the Commission, to support the minimum outflow in violation of the Lake Hopatcong Protection Act and the Commission mission statement in its bylaws. He read various statements from the stream flow report. The report starts out saying the lake has existed in its present size for over 200 years and when it is dry no water flows out of the lake, but let's ignore these facts and pretend the lake never existed to establish the need for 7.5 MGD outflow. The process should not be called stream flow reconstruction. It should be called a fairy tale. His concern with the stream flow report, as with the Miller's order, a true copy of the document may disappear and all that is left will be a narrow interpretation report which cannot be challenged.

Fred Steinbaum. He is not representing anyone and is speaking to the recreational uses of the lake. He is part of five generations on the lake and boating for 64 years in the lake. He described his extensive recreational uses on the lake and advised that he is a member of many local recreational clubs. The lake level is critical to recreational use. The lake is 50 feet deep, but the depth that is really important is the shoreline depth. He stated 6" can make a use difference which it does at his dock. It can make a difference in the ability to use a boat, launch a sailboat or go into docks. He appreciates the efforts of the DEP to have a workable plan to prevent a catastrophe from two summers ago when the level was low, but he is disappointed when there was no effort to deal with the problems of water quality and weed control. There is no funding for weed control or water quality for next year. He hopes further forward-thinking solutions will be forthcoming from the DEP and the State.

Ms. Pflugh stated that someone should make a statement relative to the water quality study. She asked Ms. Macalle-Holly to discuss the millions of dollars of investments to address water quality concerns. Ms. Macalle-Holly stated the Lake Hopatcong Commission received three grants to address water quality issues. The current one from NJ DEP 319(h) program is approximately \$800K for three stormwater management devices to reduce phosphorus loads to be done in Hopatcong State Park, King Cove in Roxbury through work with Morris County and Jefferson near the Brady Bridge. For the first 319(h) grant received, the third and final project is being installed in Crescent Cove in Hopatcong which has the highest amount of phosphorus so there will be two stormwater devices there. That grant also had a project installed at Castle Rock Road in Jefferson. The third grant was from the EPA Targeted Watershed Grant for approximately \$800K and five projects were installed from the grant. The final TWG project is an alternate septic at a daycare in Jefferson. She encouraged everyone to review the water quality monitoring reports completed by Princeton Hydro which are available on the Commission website. PH has been measuring the water quality in Lake Hopatcong for a couple decades. The stormwater management projects are making a significant difference. She asked everyone that lives on the lake or within the watershed to know that you can help improve water quality by using fertilizer that contain no phosphorus. The Lake Hopatcong Restoration plan, refined TMDL are also available on the Commission website.

Ron Sorensen, owner/operator of Lake Hopatcong Marine. He thanked Mr. Baier stating that Mr. Baier's job changed halfway through the project, but he followed through to the end. The water

quality comments are to understand what the water quality affects of low water are in the lake. The LHWLMP states that 12 cfs has been the norm, but it has not been by any means. The USGS website shows clearly that prior to 2005 there were many deviations from the 12 cfs. It was always at times when the lake was low and they tried to get it to recover. To solve everyone's problem the answer is to try to hold as much water in the lake when water is plentiful. Bart Wallin, previous person at the State Park that ran the dam, routinely lowered the flow below 12 cfs to fill the lake in the spring when water was plentiful. Mr. Sorensen stated that Mr. Baier's statement that the stream is 100% filled from Lake Hopatcong is not true because there are a lot of other tributaries into the 1-1/4 mile stretch. He stated Mr. Kurzman put together a summary of all the deviations and every year there was a deviation below 12 cfs.

John Kurzman, Lake Hopatcong. There is a lot of good in the plan, but flaws should be addressed He stated Mother Nature does not follow average per month. If there was no outflow, the lake would be 10.8" lower in three months. Flaw #1 is that 12 cfs has not been the norm and is too much to make it the new standard minimum for outflow. He provides an exhibit that shows the quantity of deviation of more than 20,000 days of USGS recorded outflow data since the start of 1923. During that period, 20% were less than 12 cfs, 10% were less than 9 cfs. When focusing on non-winter month, one in every ten days, was historically less than 8 cfs and one out of every four was less than 12 cfs. Flaw #2 is the NJGS tables used in the stream flow plan to justify the 12 cfs outflow, excludes many years of low flow data from 1963 through 1975 from the calculations. It makes the numbers in the plan erroneous. He described the exhibits he provided. Lake Hopatcong is a very small part of the contribution to the river and should not be considered as the key to water at Saxton Falls or other locations. To use square miles of watershed to use .48 cfs to compute contribution per square mile is not reliable. Flaw #4 is unlike the procedures followed for decades until 2005, releases of water even during the wet spring and rainy times, and when the lake is down a foot, begin to consider water conservation when it's too late. Do you really need to leak water out of the lake at all times whether the river needs it or not. He stated he has analyzed USGS data by month and has a table that shows an effective springtime outflow reduction schedule based on DEP history prior to 2005. The plan assumes more water out of the lake mixed with cooler water from other streams will cool the water downstream. Fighting for 12 cfs from the lake is often bad for the river. The plan should only demand more water from the lake when it will improve the downstream situation.

Lisa Kurzman, Lake Hopatcong. She reviewed her top flaw for the report and believes the plan does not conserve water at the right time. When there is plenty of out flow from other sources into the river, there is no need for the lake to release the 12.5 cfs. She does not believe that raising the outflow to 12.5 as an average is the same as in the past where it was the median. If you raise the minimum to 12.5 that raises the average above 12.5 and it will be greater outflow from Lake Hopatcong impacting the lake level.

Agust Gudmundsson, Hackettstown. He is referred to the organizations he is a member of, but he is speaking as a person that grew up on the lake and still lives downstream. All of us care for water quality and this plan does not address it which is good because it should not. It is a flow management plan and is a good plan. The 12 cfs is about 3.6" a month according to the USGS. That is science for those that say there is no science behind it. If you turn the river off completely, it's a bad thing. You will probably be sued and he does not recommend it. To lower it to 8 cfs in an emergency is .9" a month. If you take away 30% of the entire river for a 1-1/2 miles, for not even an inch a day if it doesn't rain at all. He stated the plan was good and it was put together by divisive interests. A healthy lake is good for the river and it is good for him in Hackettstown. They want a healthy lake, but are not willing to give up the river to save boating

interests. The wording says the lake may be used for recreation which is a concession to allow people to use a commercial investment for recreation. It does not say "must" it says "may" be used. He asked to please accept the plan.

Ginny MacGunvle, Bethlehem Township. She fly fishes on the Muskie and is a downstream recreational user. Downstream users care about the lake, but also care about the river. They realize the plan requires NJ DEP to strike a balance between environmental health and the natural, scenic resources of the Musconetcong River system and to maximize recreational opportunities of both systems. As downstream stakeholders they are asking for a balance between the lake's health and not just recreational and commercial concerns and health of the river when the outflow is reduced. She does not feel comfortable that the DEP can establish a standard that when they feel comfortable they can reduce the outflow. They need a quality assurance plan and standard operating procedures before the outflow is reduced.

Nancy Lawler, Glen Gardner. She is the Musconetcong Watershed Association Water Quality Monitoring Coordinator. From 2002-2009 she was employed at the NJ DEP ultimately in Bureau of Freshwater and Biological Monitoring. She sits on the NJ Water Quality Monitoring Council. She reviewed the plans and believes it is flawed in a couple ways but will focus on the monitoring aspect. The plan attempts to sound science-like without using a scientific approach to address the challenging issue of managing the water level of the lake and the outflow into the river. The plan omits references to reports that are essential to understanding its conclusion including the 2002 MSA report. The monitoring plan to determine the affects of reduced flow requires no quality assurance component, it does not identify a trigger for the monitoring, designate who will monitor with what kind of training, what parameters will be measures, and what standardized procedures and methods will be used or how the data will be analyzed. Most importantly, the plan does not address how the data will inform the decision-making process. She stated most troubling is when the plan notes that the DEP does not have continuous monitoring equipment at its disposal. NJ Monitoring and Standards has at least one piece of equipment it was willing to lend MWA for its monitoring project. It sounds like DEP is unwilling to find resources to determine the low flow effects and is willing to rely on a poor plan that has data of unknown reliability to support daily decisions on how to manage the outflow. DEP seems unwilling to share with the public the procedures used to make those decisions.

Kim Hood, Asbury. As a downstream user and MWA member, while the MWA does support the goal of the LHWLMP, we believe the insertion of the low water paragraph in this revision will interfere with protection of the resources that the plan intends to protect. She requests that the paragraph be removed until scientific study can be done to support what is in the paragraph.

Rick Ge, Musconetcong River Management Council representing Mount Olive. He stated Mount Olive passed a resolution as have other communities down river, opposing the change in the paragraph in the plan. Warren and Hunterdon Counties have passed resolution against the plan change. During the reduce flows this summer, he could walk across the river without getting his feet wet. He stated you are killing the river and you have to balance it.

Karen Williamson, Heritage Conservancy member, MWA member and Chairman of Musconetcong River Management Council. Heritage Conservancy did submit a review letter dated January 19. She inquired if agencies that submitted letters, would receive a response back. Chair Felter stated the letter was sent to Commissioner Martin. Mr. Baier stated the DEP will probably pull together a list of comments and responses in general terms. Ms. Williamson stated the NJ DEP staff spent a lot of time on the plan and it is clear that the DEP wishes it had better

tools to work with. She encourages that a section to the report be added to determine what the DEP needs in terms of information and tools to ease tensions, to build confidences and the DEP can have better information to make decisions. She also asked for a timetable for implementation.

Steven Rattner, Mount Olive. He stated he is MSA Chairman, Morris County represent to the LMRPB and on the Musconetcong River Council. He keeps hearing that after the last CAC meeting in September, the Plan went to Trenton and came back with things never discussed including the low water paragraph and a disclaimer. He asked if we are experimenting with the 12 cfs. There needs to be an understanding of the impacts on the ecosystems down river. The federal government gave the river the designation of wild and scenic. The amount of water going down river needs to be correct. He discussed how it was a priority for sewage treatment over the past 50 years to clean up the lake. He stated prior to Mr. Baier's departure from his previous DEP position, he proposed designating part of the Musconetcong River below Musconetcong and by the plant to be less than satisfactory or impaired.

Howard Mandelbaum, 149 New Jersey Avenue, Lake Hopatcong. Although he is most recent past Commodore of the Garden State Yacht Club, he is speaking for himself. He read the plan and listened to the comments. He stated the 12 cfs is an artifact. He is concerned with the health of the river downstream. The key is the health of the river between the dam and Musconetcong. He inquired if there is another measure that can be used to measure the health of the river so the lake's outflow could be moderated with the good health of the river down stream.

Mitchell Scharf, resident in the canals for seven years. He described the ecosystem in the canals, how bad the weeds were and the dead fish in the canal this year. When water smells, you know there are water quality problems and it has never smelled like that. There was not a lot of water back there. The perch spawn in the waterway. It's the most delicate area on the lake and when the level is down, they are hit the hardest. He stated his neighbor is the captain of the Jefferson Fire Boat for a long time. There is only one fire hydrant in his area, but not on his island. If there was a fire on his island, it would be hard to draw water if there is no water there.

Bill Leavens, Long Valley. He serves on the MSA Board and Musconetcong River Management Council representing Washington Twp. He is concerned about the inclusion of the low water paragraph. He stated he is troubled that the debate has devolved into us versus them. The lake and river are inter-connected and all part of a larger ecosystem. He suggested finding solutions to address concerns for both. The MWA is asking the DEP to live by the same standards that they would require of anyone who would do anything that would have an environmental impact on the either the lake or the river. They are asking that the inclusion of the low water paragraph in the plan be postponed until the effects of low water conditions are known. An environmental assessment needs to be done which will not be a burden on the lake commercial and recreational community. There are three organizations, the MWA, LHA and Trout Unlimited, that can work together to generate funding for a study. Solutions that work for everyone should be sought.

Bob Place, 37 Valencia Isle Drive. He is the fireman that was referred to, but he is not representing the fire department. When the lake is low and you go to an area where there are no hydrants, they ask where will they will draft or get water from. If there is a fire on his island, there are no hydrants and would need to draft off the bridge. With no water there, they will draft muck or wait for other town to assist to set up a swimming pool in the middle of the road and draft from there. He is in charge of the fire boat and the boat is used as a fire hydrant when there

are no fire hydrants. If there is no water, the boat cannot get to an area. He stated this year has probably been the worst for dead fish in the canals.

Tim Clancy. He stated that the Knee Deep Club has a strong position that they would like the issue resolved and they do see ebb and flow in lake levels. For those concerned about the recurring issue of water quality, obviously the Club is concerned about the water quality, but he would disagree with the lower lake level impacting the water quality. He quoted from a 1996 article written for the 50th anniversary of the Club by Dr. Souza which described how the lakes slow flushing rate of 1.7 years contribute to the lake's eutrophication which facilitate weed and algae growth. He stated while the Club would love the lake to be the perfect level everyday, they realize that they cannot control Mother Nature. If you play with the flow you will do harm to other areas such as Crescent Cove. Everyone should be working together because what is good for the lake is good for downstream. He stated its time to move on because the Commission does not have any money or staff for next year which he is so much more concerned about.

Beth Styler-Barry, MWA Executive Director. She stated the MWA participated in the CAC. There were many things that the CAC did not agree on one of which was the minimum passing flow of 12 cfs. MWA agreed that there may be reductions that can be done without harm to downstream resources, but data is needed to back it up. Temperature and observations are not sufficient for this critical decision-making. Ms. Barry quoted from CAC Chair Larry Baier's meeting notes about some CAC members' recommendation to reduce or eliminate outflow when there is a low level, but the Department cannot damage downstream uses and how maintaining outflow during hot dry weather will be critical due to low flow of other tributaries into the river. Ms. Barry stated this issue was put to rest in the spring 2010 until, without warning or explanation, the CAC received a new draft on October 2, 2010. The low water paragraph made what Mr. Baier said could not happen, an official part of the plan. The MWA immediately objected to Mr. Baier, to the CAC and DEP Assistant Commissioner Amy Cradic. Ms. Barry continued to describe the MWA's effort to address this concern with the Department. The MWA recommended path is a stream study at the upper stretch of river at 12 cfs. Data could be collected by volunteers. The MWA existing Quality Assurance Plan (QAP) could be amended to cover this study. She discussed how 18 municipalities, the Musconetcong River Management Council, LMRPB, National Park Service, Heritage Conservancy, Sierra Club, Trout Unlimited, NJ Audubon, Hackettstown Municipal Utilities Authority, MSA, Hunterdon and Warren Counties Freeholders and 100 individuals have passed resolutions or sent letter to the DEP Commissioner expressing concern that the LHWLMP does not fully address the impact of reduced flow. The concerns of such a large number of citizens cannot be ignored. She acknowledged the abilities of Ms. Barno and Ms. Campbell to make the judgments to protect surface water, but standard operating procedures and a QAP are needed as well as pass/fail criteria. MWA asks for the withdrawal of the paragraph until data is collected to support the decision.

Randy Bowledge, 42 Ithnall Road, Hopatcong. He lives in Elba Point, but does not have a problem with low water, but does have a problem getting his boat in the water when it's low because of ramp access. He moved to the area in December 2003 and described his living arrangements. In 2004 he lost his outdrive on the lake. During the drought two years ago, he did not get the boat into until July. Last year he lost his dock with the ice and spent about \$15-20K for a dock. He is trying to find a good reason to stay in the area because his taxes increase 5% annually because he is on the lake. He also described his dissatisfaction with the Hopatcong School system. Unless some of these are put in order and some of it is the lake level, he will sell his house and others that live on the lake feel the same way.

Ester Poulson, Bright's Cove, Lake Hopatcong. She listened to comments about the change in the low water flow paragraph. Her observation was if the lake did not exist and there was a drought or change in water level, any of the lower tributaries in Lake Musconetcong would be losing water anyway. It sounds like we are being asked to create an artificially high level of water regardless of ecological conditions such as a drought or low rain. She understands the concerns of people who live lower down, but if you take away this artificial support, the river and tributaries will survive as they have for thousands of years. A plan should accommodate climate and rainfall changes. If the water levels are low, everyone is in the same boat.

There being no further public comment, the Chair discussed the Commission's job and how water quality is improving. He takes exception to the Commission's only job is to worry about Lake Hopatcong. The Commission's special interest is the lake, the river and the environment. He did some research and spoke with Marty Kane at the Museum. They discussed the 1922 court ruling. The Chair stated that Mr. Kane has done as much research on the subject and he believes it was a not a court settlement, but a hand shake agreement. The Chair stated that this is important because if people back then were able to put aside their differences and work for a common cause. He listened to everyone tonight and everyone has to work together. He thanked Mr. Baier, Ms. Pflugh, DEP staff and other CAC members. The Chair stated the Commission needs to start talking with people around the lake, the KDC, other organizations down river to understand everyone's needs to try to make it work. The Chair asked Mr. Baier about next steps.

Mr. Baier inquired if his DEP colleagues wanted to specifically address anything. Being none, he stated there was a lot about the NJGS report. The reason he asked for that report was because he had no ideal if 12 cfs was ridiculously high or low or someplace close. The report was not to justify 12 cfs. He received many comments from Mr. Kurzman which he will look at again. As for next steps, the DEP will look to the Commission if it wishes to, to provide its recommendation on the plan to the Department. That is the Commission's role to advise the Department on Lake Hopatcong. He will also reconvene the CAC one more time to address a couple of items missing in the plan such as when lowering the water level when it's a foot below, when are the gates opened again. There were issues for the fall drawdown that need to be looked at. He will wait on the Commission recommendations. He stated he received a lot of stuff from people in the audience and Mr. Cliff Lundin has sent him communication from the LMRPB. He will go through the information and will prepare a group of comment to provide answers. After that, the report will go to the DEP Commissioner for him to accept or reject. He thanked Commissioners, the Chair and Administrator for having the forum and the audience for coming and sharing their thoughts.

The Chair thanked him for his hard work again. Mr. Baier responded to an inquiry indicating prior to this meeting the DEP Commissioner was briefed and already has a good ideal of the issues. He will again summarize the issues for the Commissioner for his decision and direction. Mr. Baier stated he did not really expect that there will be significant changes that the Commissioner will ask for. The Chair stated the minutes will be done. The Commission will discuss at the next meeting on February 22.

There being no further public comment, Mr. Servoss made a motion to adjourn and Mr. D. McCarthy seconded. Motion was unanimous.

Prepared by: Donna Macalle-Holly