

Notes from the second Lake Levels subcommittee meeting held on January 8, 2014, at the Chamber of Commerce Building in McHenry:

The meeting began with a welcome and introductions of the meeting attendees both in person and on the phone. Members in attendance included Bob Browning, and Bob Hoffmann, subcommittee co-chairs, Morgan France, Richard Matlick, Paul Weiler, Jess Wittemore and Roger Zbel. Staff in attendance included Alan Klotz of DNR, and Mike Bilek of the Hughes Center for Agro-ecology who serves as staff to the subcommittee. On the phone were Catherine Shanks and Shawn Seaman, of DNR, John Grace, Lyn Poorman and John Smith of DNR. Several members of the public were also in attendance or on the phone.

The educational presentation was by Morgan France on the elements of a water budget.

Definitions, a schematic on water inflows and outflows, rainfall records, and the change in storage range were discussed. Mr. France proposed that a water budget based on:

1. the lake recharge,
 2. the past rainfall, and historic rainfall data and
 3. the changes in lake levels relative to the changes in volume from stage storage data,
- could lead to a water budget model with predictive capabilities to allocate the water resource.

It seems that the existing formula is not based on water in the lake or how much is likely to be added with time. Temperature enhancement release (TER) model or formula should be modernized using real time cloud cover data, real time flow data from Hoyes Run gage (instead of the Oakland gage) and real time temperature at the Hoyes Run Gage.

A predictive model based on aforementioned improvements and historic rainfall, and recharge rates and the stage of the lake may make it possible to schedule whitewater releases with several days notice and keep more water in the shallow coves for a longer period of time. The group working on this data can develop the new model and have it evaluated and reviewed by DNR and others.

Discussion and questions followed the presentation and included unnecessary TER's, discretionary releases determined by Brookfield for power generation, the need to revisit and refine protocols for TER's, and the net water savings these improvements would bring. It was agreed that MDE would present at the February meeting on what it uses to evaluate the factors that influence water levels, and that DNR would present on the coldwater fishery and the TER's. The next part of the meeting agenda would focus on making a list of the questions that the subcommittee had for the next presenters. Some remaining concerns include wicket gate leakage and the rates of release for other uses. Members felt it was important to look for any and all opportunities for water savings.

The subcommittee spent the next hour discussing questions that it wanted to raise with MDE.

As the discussion continued, questions about other issues were raised, and would be forwarded to DNR for the fishery and TER discussion, and perhaps to Brookfield, if they agreed to speak to the group. The full list of questions is attached to this document. There were also concerns about the dock permitting process, SAV, and shoreline erosion raised during the discussion and those concerns outside of the purview of the lake levels subcommittee will be discussed at a future meeting and referred to the subcommittee addressing those issues.

The subcommittee focused the remaining 45 minutes on a discussion of the Problem Statements and the recommendations that the subcommittee would propose to the full DCLWMP Steering Committee. A discussion led to the consolidation of the three problem statements into one: To manage Lake Levels such that an equitable allocation of water resources can be established. The subcommittee voted unanimously to accept this consolidated problem statement, keeping the issues of public and commercial recreation, public and commercial whitewater recreation, downstream commerce, the fishery and power generation as goal areas to be addressed.

jmbilek 1-30-14

Notes from the Lake Levels Subcommittee Brainstorming

During the January 8, 2014, Lake Levels subcommittee meeting, members discussed issues to be addressed by MDE during their upcoming presentation. Following is a list of the questions, comments and statements that the Lake Levels subcommittee would like to see covered:

1. What is the rate of release for the major user groups?
2. During the last Rule Ban review process in '06 or '07, the re-permitting did not change the Rule Ban. Recently the POA is interested in changing the Rule Ban. This has something to do with dock permitting. Is there dock permitting depth data? (that is equitably applied?) What is the dock permitting based upon? Is there data behind the decisions? Is there a depth map to show where docks can be permitted? *
3. How many miles of trout streams are there in Garrett County?
4. How many miles of stocked trout streams are there in Garrett County? Where are they?
5. Information is requested about the Water Budget. How much is allocated to FISH? ...to WHITEWATER? A better question might be "how were these allocations determined?"
6. What does fluxuation in the lake level do to erosion?*** Several points of shoreline are exposed causing erosion. Can this be addressed**
7. What is the Quality of the water in the lake? Are there fish kills? What is the temperature and the oxygen level of the water in the lake? Are fish stranded?
8. How do the lake levels impact water quality?***
9. How do the lake levels impact the local economy? How do lake levels impact rentals? Do SAV and Geese impact water quality?*** How do the lake levels impact tourism and the ability to swim and fish?
10. Compare the profitability of Brookfield with their drawdowns v. the economic impact of the other users.
11. (when the water budget is developed...) are all the impacts studied before decisions are made about drawdowns? And are impacts studied by Brookfield prior to discretionary drawdowns?
12. Are there any studies on aquifer recharge or other groundwater movement? How does that impact lake levels, the water budget and any predictive model?
13. Listening to the discussion, how do we handle the overlap between our subcommittee and the other subcommittees?

14. What is the purpose of a water budget? Beyond the definition, and especially in the drought years? (discussion ensued) Everyone, all users should share equally in the resource. With a predictive model, the resource would be distributed according what is available. It is allocated equitably. A water budget fits into MDE's process, and (the best possible water budget) should be this subcommittee's recommendation to the Steering Committee.
15. (based on the previous comment) A predictive model of resource allocation should be recommended to the SC to be used in wet and dry years.
16. How far (into the future) can a predictive model work? Example, 2013 was generally a wet year, but September and October were dry. (more discussion) a model can generally predict 2 to 3 weeks out, but it must be set up and tested.
17. More information is needed about discretionary releases. How do they fit with TER's and WW releases? More info about Brookfield's flexibility, and how they make money from the various releases.
18. (based on previous comment) Brookfield has many discretionary releases building up to the top of the Rule Ban in the spring. Building to the top in July is important, but is there any flexibility in what they do? What would the economic impacts on Brookfield be if discretionary releases were controlled by a new rule band which is just below but very close to the upper rule band from May 1 to July 1, and mid rule band until October 1?
19. (based on previous comment) is there detail on each release? Data on who the release is for, and what the draw down is? (in inches) What is the cost per inch?
20. There are unusable docks. How are dock permits issued? How many people are impacted by unusable docks. * Complaints seem to start at the level of 2458 and below. Other comments included a letter in which DNR states that problems begin at 2457.5., and What is 'too high'? Are shoreline controls an answer to water levels that are too high?***
21. What is the data available on lag time for groundwater recharge?
22. What is the correct interpretation of the rule band regarding the required level from month to month? Is it a stair step, or, is it a straight line between the monthly end points.
23. We need input from MDE regarding the administration of the temperature enhancement release protocol. In 2011 all of the temperature excursions were attributed to protocol failure.

* suggest referring these questions and comments to the Administrative subcommittee (looking at dock permitting)

** suggest referring these questions and comments to the water quality subcommittee.