## Notes from the Lake Levels Subcommittee Brainstorming, To be forwarded to DNR Fisheries and PPRP

During the January 8, 2014, Lake Levels subcommittee meeting, members discussed issues to be addressed by DNR Fisheries and the Powerplant Research divisions 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. How many miles of trout streams are there in Garrett County?
  - There are about 224.2 miles of wild trout streams in Garrett County. Please refer to complete listings on pages 59 and 60 of the 2006 Maryland Brook Trout Fisheries Management Plan for stream names and locations:

## http://dnr.maryland.gov/fisheries/pdfs/mdbrooktrout006.pdf

- Many of these trout streams are small 1<sup>st</sup> and 2nd order streams on private lands offering no public fishing opportunities. Most streams support only wild Brook Trout which tend to be less than 12 inches in length.
- 2. How many miles of stocked trout streams are there in Garrett County? Where are they?
- For a complete listing and location for all Garrett County Trout Management Areas that are stocked with trout, please see the following link: <a href="https://maps.google.com/maps/ms?hl=en&ie=UTF8&msa=0&msid=115086714482906793176.0">https://maps.google.com/maps/ms?hl=en&ie=UTF8&msa=0&msid=115086714482906793176.0</a> <a href="https://odastrocked.com/maps/ms?hl=en&ie=UTF8&msa=0.692073,1.112366&z=10">https://odastrocked.com/maps/ms?hl=en&ie=UTF8&msa=0.692073,1.112366&z=10</a>
  - Put and Take Trout Fishing Areas 9 rivers and streams totaling 57.52 miles. Stocked with adult trout.
  - Delayed Harvest Trout Management Area 3 rivers totaling 13.28 miles. Stocked with adult trout.
  - In addition, there are 9 lakes and ponds totaling 5,508 acres that are stocked with adult trout for Put and Take Trout Fishing opportunities. DCL makes up the majority of acreage and only three impoundments in Garrett County support year round trout fishing.
  - Catch & Return Trout Fishing Areas 2 rivers totaling 7.88 miles. Stocked with fingerling trout, bonus adult trout, or not stocked in wild trout portion. These rivers are known for its trophy sized Brown Trout and Rainbow Trout.
  - The Catch & Return Trout Fishing Areas are the most important trout management areas in the county because they are large enough to support sustainable populations of trout of desirable size and because they support fisheries all year. Put & Take Trout Fishing Areas, Delayed Harvest Trout Fishing Areas, and most impoundments do not provide trout fishing during the biggest tourist months of June, July, and August.

- 3. (ALSO TO MDE) 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?"
  - Refer question to MDE or PPRP.
- 4. 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?
  - Please refer to the MD DNR Resource Assessment Service's report: *Deep Creek Lake Water Quality Monitoring Program 2013 2014* and the *Deep Creek Lake 2012 Water Quality Monitoring Summary* for the most current water quality studies in Deep Creek Lake:

 $\underline{\text{http://www.dnr.state.md.us/ccs/pdfs/dclwmp/2014\_WQ\_DCL\_MonitoringProgram.p}} \\ \text{df}$ 

http://www.dnr.state.md.us/publiclands/pdfs/dcl waterquality2012.pdf

- The MD DNR Resource Assessment Service reports that DCL exhibits patterns of a typical deep, temperate zone reservoir with two mixed seasons and two stratified seasons, pH levels > 6.5 and < 7.3, and low turbidity levels (< 100 NTU) which do not exceed Maryland Department of the Environment water quality criteria for its Use III-P designated use. The lake stratifies in the summer when dissolved oxygen concentrations approach zero ppm at depth > 10 m; however, a zone of cold and oxygenated water sufficient to support two-story fishery (both warm/cool water populations of bass, Walleye, and panfish and coldwater species like trout and pike) in all seasons.
- A major fishkill occurred in 2010, attributed to *Aeromonas hydrophila* and gill parasites during an unprecedented hot summer elevating lake temperatures to stressful conditions for the lake's fish population. Record high water temperatures were recorded in early July of that year while the lake was still within the rule ban.
- Fishkills attributed to stranding have not been documented in Deep Creek Lake due to the gradual lowering of the lake.
- 5. How do the lake levels impact water quality?\*\*
  - From a fisheries management perspective, annual lake level fluctuations have no noticeable effect on the lake's fish population due to water quality. **This question should be referred to the DCLWMP Water Quality Sub-committee.**
- 6. (ALSO TO MDE) 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.
  - Refer to MDE or PPRP.

- 7. (ALSO TO MDE) (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?
  - Refer question to MDE or PPRP.
- 8. (ALSO TO MDE) (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?
  - Refer question to MDE or PPRP.
- 9. (ALSO TO MDE) 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.
  - Refer question to MDE or PPRP.
- 10. (ALSO TO MDE) 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.
  - Refer question to MDE or PPRP.