Friday, June 5 2020

TO: City of Hudson
Village of North Hudson, Board & Finance Committee
Hudson Township

RE: Lake Mallalieu Association request for placement of upcoming meeting agenda

Dear Council & Finance Committee Members,

I would like to take this opportunity to introduce myself and formally request addition to your agenda for the next upcoming community meeting. My name is Dr. Bryan Brettin and I am a resident of City of Hudson and currently a member of The Lake Mallalieu Association (LMA). As you are likely aware the councils and committees of the local Hudson municipalities have been a tremendous partner in recent years as LMA has worked diligently to help secure approval for the rebuilding of the dam at Little Falls Lake in Willow River State Park and to help restore the health of Lake Mallalieu and the Willow River. The purpose of this agenda request is to review the progress and work that has been completed, to express our gratitude to the council and committee members for their past efforts & support, to update members on current efforts that are underway, and to request continued collaboration & financial support regarding ongoing water quality testing & monitoring conducted by U.S. Geological Survey (USGS). Your previous support for USGS testing was quite significant in securing approval of the new Little Falls Dam and we hope that you will consider continued support as the efforts of LMA now turn to remediation of lower Willow River and Lake Mallalieu.

The Lake Mallalieu Association is proud to have been a leader in helping to secure the rebuilding of the dam in Willow River State Park at Little Falls Lake. This required years of discussion, planning, and collaboration with local and state elected representatives. While a tremendous milestone, completion of the dam is only the first step in a long road that we must travel together if we are to restore the health and well-being of Lake Mallalieu so that future generations are able to continue to access and enjoy this ecological and recreational community asset.

As you may know, removal of two upstream dams and the rebuilding of Little Falls Dam has inundated Lake Mallalieu with silt, sand and many other deposits that have greatly impacted the overall quality of the lake and its ability to be safely navigated.

In response, the LMA Board has set forth on a Three-Part Plan, the first of which was to ensure that the Little Falls Dam would be rebuilt. The LMA would like to recognize the efforts of our members and the council leaders of our local municipalities in supporting the rebuilding of the Little Falls Dam to stem the tide of further damage to the Willow River and Lake Mallalieu.

The second part of the LMA plan consists of a comprehensive review of historical data regarding the lake & upper watershed and a comprehensive study to establish just how healthy/sick Lake Mallalieu is today. The result of Lake Mallalieu's "physical" will serve as the foundation for the third part of the plan: remediation of Lake Mallalieu, in an effort to undo the damage resulting from removal/construction of the upstream dams; addressing causes of "point source pollution" to the Willow River; and effectively managing surface water runoff throughout the watershed.

With respect to the second part of the plan, the LMA board has approved funding and secured the assistance of Applied Ecological Services (AES) as an independent consultant to conduct the lake and watershed assessments in order to document how healthy/sick the lake is today. This investment places a considerable financial hardship upon a small community organization such as ours with limited finances and resources. The LMA Board has approved an expenditure of $18,000 to complete this task and will require many hours of volunteer time. However, we believe this investment is absolutely critical as the results of the AES assessment will help us in the third part of the plan, which is to apply for public funding and available grants to improve water quality and the recreational value of Lake Mallalieu and the lower Willow River.

In addition to the data to be reviewed and collected by AES, ongoing water monitoring and sampling will be imperative to scientifically support future requests and to provide data and analytics. As you may be aware, The USGS has been conducting water monitoring at the Willow River Gaging Station in Willow River State Park, but this monitoring is scheduled to end on September 30, 2020 without continued funding. Funding to support this testing has come from various sources, including LMA, The City of Hudson, Hudson Township, and Village of North Hudson.

You may be wondering what are we doing at the gaging station and why it is important. USGS Hydologic Technician Ben Torrison monitors gage height (water surface elevation) which is used to compute discharge. Discharge is what folks sometimes refer to as streamflow, or simply the volume of water moving down river past the gage. Also, baseflow and event flow water samples are collected that are analyzed for total and dissolved phosphorus and suspended sediment. The discharge record and water samples together are used to compute daily concentration and load parameters every year. This monitoring began back in October 2012 as part of a larger project with the objective of looking at nutrients and sediment going from the Apple, Willow, and Kinnickinnic Rivers to Lake St. Croix in an effort to get a handle on the nutrient problems present in the Lake. That project ended in September 2015 but monitoring continued at Willow only in response to the dam replacement in Willow River State Park.

These data generated by the Willow gage monitoring have allowed us to track pre-dam removal amounts of nutrients and sediment moving down the river and the entire time-frame the dam was removed and being replaced. The Willow River monitoring project is scheduled to end September 30, 2020. This means the gage will no longer be in operation. USGS is certainly interested in continuing the gage and two options are available with respect to continued monitoring: both options would include stage and discharge info, but one would not include a water temperature probe while the second option would. We believe the additional expense for water temperature testing is warranted to monitor cold water discharge that was part of the engineering of the new dam to provide cold water flow to support Willow River Trout populations. The annual operational cost for continuing Willow for gage height/discharge would be $12,700 with no temperature probe; $15,200 with temperature probe recordings. USGS would be prepared to invest $5,000 per year. Wisconsin Department of Natural Resources has agreed to contribute $3,500-$6000 (depending upon temp. vs. no-temp) towards continued testing. Additionally, we are securing $600 commitments from St. Croix County, Kiap-TU-Wish chapter, and St. Croix County Sportsman's Association. LMA will also be committing $600 towards continued water monitoring.

Support for this initiative and project has been provided by The City of Hudson, Hudson Township, and Village of North Hudson in the past. The LMA and members of our community are truly grateful for your past and ongoing partnership and support. On behalf of the members of LMA, I respectfully request consideration for continued support to help aid in the plan to support the remediation of Lake Mallalieu. This request would be for $600 from each local municipality to continue water testing for an additional year. Perhaps more important than the financial commitment is the continued positive interaction and collaboration between LMA and the local municipalities. This relationship and support has been cited repeatedly by WI DNR as an important factor in the goals that have been achieved to date and for consideration for future funding as well.

I, along with the other LMA members, truly appreciate your time and consideration with this matter. I look forward to hearing back from you regarding the July agenda. Please feel free to reach me on my cell at (952) 239-1810 or via email at bryanbrettin@yahoo.com.

Kind Regards,

Bryan Brettin