

June 28, 2008

Mr. Brent Binder
WDNR
Water Management Engineer
1155 Pilgrim Road
Plymouth, WI 53073-4294

Dear Mr. Binder:

RE: Request for Hearing and Full Environmental Impact Statement pursuant to Sections 31.06, 31.185 and 31.235, Wisconsin Statutes

After reviewing the Environmental Analysis (EA) for the Nemahbin Roller Mill Dam Abandonment, presented at the Public Informational hearing dated June 10, 2008, the Upper Nemahbin Lake Management District (UNLMD) is requesting that a full Environmental Impact Statement (EIS) and Hearing be required due to considerable and important impacts that were not adequately addressed in the EA.

1. With respect to the issues not addressed in the EA, the UNLMD summarize the key sections below where the EA is not complete. Consequently, the UNLMD submits that the current decision not to prepare a Full EIS Process is not accurate.

Section 2, Purpose and Need, has omitted relevant historical information regarding the operation, failures and releases of the Nemahbin Roller Mill Dam, which have previously been documented by WDNR to diminish the downstream hydraulic capacity, habitat, and water quality of the reach of the Bark River from below the Roller Mill Dam to the inlet of Upper Nemahbin Lake. As documented in SEWRPC Memorandum Report No. 101:

“The conditions reported by Aqua-Tech, Inc. (1970) at the Bark River inlet were also noted during the present investigation--the major growths of nuisance aquatic plant species such as milfoil continue to occur primarily in this area where the lake sediments are considerably more silty and the lake waters more turbid than elsewhere in the waterbody. Those conditions may be related to environmental disturbances and the input of particulate materials from past failures of the Roller Mills Dam situated on the Bark River between Nagawicka and Upper Nemahbin lakes (WDNR July 19, 1989; July 27, 1989 and February 12, 1990).”

Up to "about a foot of silt" and other contaminants which have been reported to have been deposited in the Bark River debouchment into Upper Nemahbin Lake (Lake Country Reporter July 13, 1989). This allegedly inundated a pre-existing gravel bottom and now provides a suitable substrate for invasive macrophytes.” (SEWRPC Memorandum Report No. 101)

These historic failures of the Roller Mill Dam have led to significant documented sedimentation in the Bark River reach below the dam, which has degraded the down stream natural state, scenic beauty value and diminished greater recreational facilities for the larger number of people. Recent surveys by WDNR

and SEWRPC staff have indicated the presence of endangered species of mussels and fish species of special concern in this reach. Therefore, the current proposed removal of all the oak planks associated with the Roller Mill Dam, even if drawn slowly, will undoubtedly lead to much more deposition and habitat degradation than previously recorded.

Based upon recent digital elevation models provided by Waukesha County, the water surface elevations indicate that the backwater effect of Upper Nemahbin Lake under normal flow conditions extends approximately 1,800 feet upstream. Hence, this area in particular will be extremely vulnerable to an increased sediment load and increased sediment deposition (see Doyle et al. 2003, Bednarek 2001). Stream velocities in this reach are very low and particles will settle out of the water column, smothering the mussel populations and significantly modifying the fish habitat and food stock occurrences in this reach. The WDNR staff have previously noted concern over the loss of fish habitat and recreational value of the river along with potential losses in land values within this downstream reach.

Additional issues of concern not addressed in the EA include "navigation problems" and "the loss of fish habitat and recreational value of the river with potential losses in land values" as a result of previous dam failures which released "hundreds of cubic yards of sediment" that have accumulated at the inlet of the Bark River to Upper Nemahbin Lake, leading WDNR Water Regulation and Zoning staff to actively seek enforcement of the impoundment level violations which have occurred at the Zerwekh property (**See attached WDNR letter Matthew C. Weidensee July 19, 1989; and See Attached WDNR Ltr. To John Lacenski of July 27, 1989 Page 1**).

During 2001, TN & Associates noted that the deepest recorded sedimentation was measured at the inlet to Upper Nemahbin Lake. In fact, TN & Associates were unable to determine the actual total depth of sediments at the inlet of Upper Nemahbin Lake within the areas marked as greater than five feet in depth, because the sediment depths exceeded the limits of their equipment. See "Watershed Inventory of the Bark River Between Nagawicka Lake and Upper Nemahbin Lake," TN & Assoc., June 2001 Page 10.

In light of the above it is requested that these historical events be documented in the EA and considered in the development of the DAM REMOVAL PLAN. Of specific interest is an analysis of the sediment remaining in the impoundment and the sediment deposited at the mouth of the Bark River inlet to Upper Nemahbin Lake, as indicated above, with provisions in the DAM REMOVAL PLAN to prevent transport of thousands of cubic yards downstream to be trapped in an area already degraded by earlier sediment releases from the Roller Mill Dam.

2. Based on the foregoing, the Upper Nemahbin Lake Management District requests that a full EIS be prepared prior to any drawdown or removal of the Roller Mills Dam. This assessment should consider both measures to stabilize the basin of the Roller Mill Dam to reestablish the natural stream course, stabilize flocculent sediments that have accumulated in the historic stream bed over the lifetime of the dam, and manage the dam removal process in a staged manner to minimize the risk of downstream sediment movements that will adversely affect the Bark River upstream of Upper Nemahbin Lake. Rehabilitation of the downstream section of the Bark River between Roller Mill Dam and Upper Nemahbin Lake should also be considered following the proposed removal of the Roller Mill Dam structure.

3. The Upper Nemahbin Lake Management District requests that a public hearing on the findings of the EA be convened to review this new evidence and include consideration of the downstream and upstream consequences of dam removal on the habitat of the Bark River and Upper Nemahbin Lake. Specifically, the UNLMD submits that insufficient attention has been given to the stabilization of the sediments in the Roller Mill Lake basin prior to dam removal. This lack of consideration affects both the upstream Roller Mill Dam basin where unrestricted "headcutting" is a real risk, and the downstream Bark River and Upper Nemahbin Lake where sediment deposition can radically and negatively modify stream habitat to the

detriment of fish and mussel populations. In addition, such deposition can substantially impact navigability in this reach of the Bark River (one business and several homeowners would be adversely affected by sedimentation of this reach), as well as its ability to pass future flood flows, placing infrastructure and properties at risk due to restriction of the hydraulic capacity of the River. As with the potential environmental impacts addressed under point 1 above, these concerns are not addressed or are inadequately addressed in the EA, leading to the faulty conclusion that an EIS is not required.

4. As an interim measure designed to protect both the upstream basin and downstream segments of the Bark River, the Upper Nemahbin Lake Management District further requests that all the stop logs, removed as a precautionary measure during the recent heavy rains, be replaced without delay and the lake levels be restored to such a level as to prevent movement of sediments within the Roller Mill Dam basin and from entering the downstream segment of the Bark River. As the EA currently states, the drawdown of the Roller Mill Dam impoundment should be effected in a staged manner so as to retain flocculent sediments within the former lake bed and not transfer these sediments into environmentally sensitive downstream portions of the Bark River. WDNR staff in the EA note that erosion control plans, etc be prepared prior to any drawdown and dam removal be effected.

Sincerely,

William L.Barthel
Upper Nemahbin Lake Management District

Cc: Ms Michelle Schneider
Rep. Nass
Sen. Kedzie
Mayor Ed McAleer, City of Delafield

References

Aqua-Tech, Inc., Report, "Limnological Survey of Upper Nemahbin Lake for the Determination of Water Quality, " 1970.

Bednarek, A.T. 2001. Undamming Rivers: A Review of the Ecological Impacts of Dam Removal, Environmental Management, Vol. 26 (no. 6): 803-814.

Doyle,M.W., E.H. Stanley, and J.M. Harbor. 2003. Channel adjustments following two dam removals in Wisconsin, Water Research Research, Vol. 39 (no.1): 1011.

Lake Country Reporter, Zerwekh's Apologize for Dam Break", July 13, 1989, page 26.

SEWRPC Memorandum Report No. 101, Upper Nemahbin Lake Watershed Inventory Findings, Waukesha County, Wisconsin, May 1995.

TN & Associates, Inc. "Watershed Inventory of the Bark River between Nagawicka Lake and Upper Nemahbin Lake, Waukesha County, Wisconsin." Prepared for the Upper Nemahbin Lake Management District, May 2001.