## State Of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Carroll 0. Bfudny Secretary

Box 12436 Milwaukee Wisconsin 53212 fax: (414) 562-1258

July 27, 1989 File Ref: 3564

John Lacenski Waukesha County Warden Department of Natural Resources 165 Ridgeway Drive Dousman, WI 53118

## Dear John:

RE: Nemahbin Roller Mills Dam, Waukesha County (Unregulated Drawdown).

On July 10, 1989, I responded to a complaint which I received concerning heavy turbidity in the Bark River below the Nemahbin Roller Mills Dam. I took pictures both upstream of the impoundment and below the dam. It was obvious that the sediment had come from the impoundment during a drawdown. Upon inspection of the dam I could see where six Co eight new boards had been replaced in a quarter section of the dam. Some boards from the dam were laid on the lawn and on top of the structure. Several of the boards were quite weathered but none of the boards present were actually broken in half. One board was warped in a bow shape. I spoke with Mr. and Mrs. Kenneth S. Zerwick about the complaint and explained chat there was a sedimentation problem downstream of the dam. Mr. Zerwick said Chat he was the owner of the dam and that one of the old boards in the dam had failed while he and his wife were out of town. I believe they were in Rochester Minnesota at the Mayo Clinic. Mr. Zerwick said he had to remove the top boards when they returned because the bottom board was warped and leaking sediment and water downstream. I asked the Zerwicks if they had contacted the Dam Safety Department at our Madison Office and they said they did not. I informed Mr. Zerwick that he should contact the Dam Safety personnel in Madison prior to any emergency draw downs so they can monitor the water drawdown at a rate that would reduce sedimentation downstream.

I went downstream to Al's Bait Shop and spoke to the owner about the sedimentation problem. He stated that Mr. Zerwick has opened the dam on several occasions over the last ten years and always claims that there was a board failure or vandalism. He claims that Mr. Zerwick opens the dam to reduce the amount of sediment built up above the dam so maintenance of his power turbine is easier. He also claimed to have seen the Zerwicks home on the day that Mr. and Mrs. Zerwick said they were in Rochester, Minnesota.

He gave me some pictures he had taken during the drawdown. One of the pictures show all of the boards out of one section of the dam and about a one foot head of water flowing from the impoundment. I inspected the entire channel below the dam for quantity of sedimentation which had been newly deposited. I believe sediment had been deposited in an area 600 feet long and 35 wide at an average depth of 6 inches. The actual depth of the silt layer varies from 0 to 1.5 feet with the 1.5 foot maximum depth centered in front of Al's Boat Shop. This quantity of material is equal to 388 cubic yards of sediment. The sediment is causing a navigation problem for all residents in the 600 foot stretch and for customers who rent boats from Al's Boat Shop.

I recommend that Mr. Zerwick be issued a ticket for violation of minimum operational levels of the Roller Mills Dam and be required to restore the 35 foot wide 600 foot long section of channel which is clogged by sediment. This can be done by mechanically dredging from the shore down to the hard bottom of the channel. Our Department would work with Mr. Zerwick by staking the areas to be dredged and estimating approximate depths to be dredged.

If you have any questions on this matter, feel free Co contact me at .(414) 562-9672.

Sincerely,

Matthew C. Weidensee

Water Management Specialist

MCW/pan

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