

OVERVIEW: THE BIG EAU PLEINE AND ITS FISH KILL PROBLEM

During the winter of 2008-2009 there was a massive fish kill on the Big Eau Pleine reservoir in central Wisconsin. The DNR estimated the kill at about 75% of the fish population. Historically the fishery is great; then it crashes due to a loss-of-oxygen kill. Since 1937 there have been fish kills of varying severity every 3 to 4 years on average.

The loss-of-oxygen causes are normally the same. Excess nutrients and organic material from runoff pollution cause algae to bloom in the summer and then die in winter, consuming available oxygen and causing the fish to suffocate. Low reservoir water levels going into the winter have been shown to be a major contributing factor. In recent years a neglected aerator contributed to the problem (repairs of \$60,000+ were required).

After the fish kill, BEPCO (Big Eau Pleine Citizens Organization) rallied to “never let this happen again”. BEPCO held a symposium inviting members of the DNR, Marathon County, WVIC (Wisconsin Valley Improvement Company), local, State and Federal government officials, the press and the public. As a result, Marathon County set up a “Task Force” that continues to work on these issues. We have rebuilt the aerator to provide a limited fish refuge during the worst of the winter.

The experts expect it will take decades and millions of dollars to fix the excess nutrient/pollution problems. But there is way to stop the fish kills now! BEPCO analyzed the last 41 years of operating data on the Big Eau Pleine Reservoir. We found that if the reservoir is 60% full or more at the start of winter, and it is not drawn down below 20% full by the end of winter, then the chances for a fish kill are extremely small. WVIC can change their operating methods to do this!

WVIC built the Big Eau Pleine and other reservoirs in northern Wisconsin to store water when it is wet and release it when it is dry. This helps level the Wisconsin River flow to maximize the generation of hydroelectric power and reduce flooding. Water is also released from the reservoirs to provide a DNR required minimum flow in the river that protects the river fishery by diluting the remaining allowed effluent pollution from industries and communities.

More water than necessary is now routinely released from the reservoir in early summer per WVIC's operating policy. This water can be saved to make sure the reservoir is kept at 60% full or more at the start of winter. This water can then be released during the winter. The change can be done without risk to the minimum river flow and without taking any more water from the reservoirs up north. Little if any hydropower generation is likely to be lost. BEPCO calls this “The 60% Solution”.

A change in WVIC's operating license needs to be made to allow this to happen. There is a license review period happening during the first half of 2011 where anyone can comment on needed changes to WVIC's operation of the Big Eau Pleine reservoir. BEPCO and other groups will recommend changes.

Based on economic studies of other lakes in Wisconsin, we estimate the positive economic impact to the central Wisconsin area of fishing on the Big Eau Pleine to be \$2 million per year! Much of this money and the recreational benefits are lost for years when there is a serious fish kill like 2 winters ago!

You can help by asking WVIC to step up as a good environmentally concerned neighbor and improve their operating model to provide enough water for the fish to live! Send a message to your legislators also.

The BEPCO Board of Directors.

More information at www.bigeaupleine.org including legislative contacts.