



April 13, 2006

Mr. Scott Koehnke
Wisconsin Department of Natural Resources
647 Lakeland Rd.
Shawano WI 54136

RE: Waupaca Country Club Proposed Diversion of the Waupaca River,
Docket # IP-NE-2005-69-0602WL

Dear Mr. Koehnke:

Thank you for the opportunity to provide comments on the proposed diversion of water from the Waupaca River by the Waupaca Country Club under section 30.18 of the Wisconsin Statutes. The proposal, which seeks to legalize and potentially expand an existing, unpermitted diversion, also calls to question the appropriateness of the Public Rights Stage (PRS), and the lack of a designated minimum flow for the Lighting Plant Dam upstream of the Waupaca Country Club's continuing illegal diversion. Our comments address all three inextricably linked issues.

These comments are submitted on behalf of the River Alliance of Wisconsin and Midwest Environmental Advocates. Midwest Environmental Advocates is a non-profit environmental law firm dedicated to providing legal services to protect Wisconsin's air and water. The River Alliance of Wisconsin represents more than 2,400 individuals, organizations and businesses dedicated to advocating for the protection, enhancement and restoration of Wisconsin rivers and watersheds. Many of the River Alliance members live on, visit, paddle and fish the Tomorrow-Waupaca River and hold this coldwater river dear to their hearts. We share their concerns about the proposal to pump 250,000 gallons of water per day from the Waupaca River between April and November and in particular, the proposal to set a PRS at 811.80 MSL.

1) Waupaca Country Club Should Not Be Given An After-the Fact Permit Without First Being Held Accountable for Their Longstanding Illegal Taking of Public Waters.

Section 30.18 of the Wisconsin Statutes requires any riparian to apply for a permit to divert surface water from any navigable stream for irrigation purposes. According to the DNR, this long-standing law has been violated for many years by the Waupaca Country Club. Since at least 2001, the Waupaca Country Club has knowingly been violating Wisconsin law by taking water out of the Waupaca River for irrigation purposes without a permit. The Waupaca Country Club's actions constitute a public nuisance under section 30.294 of the Wisconsin Statutes in that the Club failed to get a permit under section 30.18, and is liable for up to \$10,000 per violation. The DNR should be enforcing Chapter 30 to ensure that it is adequately protecting public rights in the

navigable public trust waters of Wisconsin. The DNR should not reward permit violations by simply issuing an after-the-fact permit to legalize the Waupaca County Club's illegal behavior. This will only encourage others to violate Chapter 30 and diminish our valuable shared public trust waters. Instead, the DNR should be pursuing enforcement options and holding the Country Club accountable for blatant violations of Wisconsin Statutes designed to protect public waters.

2) The PRS Should be Set at a Higher Level to Protect Public Rights.

Section 30.18(5)(a) of the Wisconsin Statutes states that DNR shall approve a permit to divert water for irrigation if both of the following apply:

1. That the proposed diversion will not **injure any public rights in navigable waters**;
2. That the water to be diverted is surplus water or, if not surplus water, that all riparians who may be adversely affected by the diversion have consented to the proposed diversion.

(emphasis added). Section 31.02 of the Wisconsin Statutes allows DNR to establish a minimum level on any navigable body of water to protect public rights and interests. The *Wisconsin Waterway and Wetland Handbook, Chapter 90 – Surface Water Diversion* provides guidelines for the standard operating procedure and expected analysis the Department should use to determine this minimum level and when a water diversion will protect public rights and interests. On page 9, paragraph 4, the Handbook states:

The public rights stage is the minimum stream stage that will meet the needs of navigation, fish and wildlife, water-based recreation, aesthetic enjoyment and water quality preservation. The public rights stage is not intended to account for the water needs of downstream riparians.

On Page 9, paragraph 6, the Handbook states that the public rights stage is determined by following the procedures in the fish management guidelines, developed in 1977 and included in the Handbook as Attachment 1. The Handbook goes on to state, on page 9, paragraph 8, that the 7 day, 2 year low flow (Q7,2) should be used to approximate the average annual flow when gaging information is not available, and "(It is strongly recommended that this low flow figure be considered when PRS is established." On page 9, paragraph 9, the Handbook also calls for the field investigation to include a measure of flow and stream gradient at the sites and an evaluation of the biological communities present.

According to your March 30, 2006 memo, a habitat assessment was carried out, but the assessment does not appear to provide justification for the preliminary PRS set by DNR. The memo notes that: "In general, water level reductions below the PRS would have profound effects on the ecology of the streams at multiple trophic levels and at multiple spatial scales" (page 2, paragraph 1). The site-specific assessment found 22 fish species including the greater redhorse, currently listed as a state threatened species, six species of

mussels including the elktoe, a statewide special concern species, a wide diversity of macroinvertebrates, and the state threatened Wood Turtle, all of which would be negatively impacted by low water levels. We have no disagreement that *by definition*, flows below PRS will not meet the needs of navigation, fish and wildlife, water-based recreation, aesthetic enjoyment and water quality preservation, and will therefore impact these aquatic species; the unanswered question is how the Department arrived at 811.80 mean sea level as the PRS. We request the Department provide a description of the instream habitat model or method for low-flow estimation that was used to obtain the proposed PRS. Does this correspond to widely accepted scientific approaches? See Attachment 1A for scientific citations on accepted methods for determining minimum instream flows.

It appears that the DNR set the PRS *below* the Q7,10 flow of the Waupaca River. Attachment 1, section A.1. of the Handbook defines Q7,10 as follows:

The consecutive 7-day low flow that occurs on the average of once in ten years. This flow is statistically present or exceeded 97-99% of the time or flow may be at or below this discharge 1-3% of the time in any given year. The Q7,10 flow is used primarily for establishing water quality parameters for industrial and municipal wastewater dischargers. This flow is usually indicative of drought conditions. Generally, **sustained instream flows at this discharge are devastating to instream aquatic habitat and biota.**

(emphasis added). According to your April 4, 2006 email to me, the Q7,10 flow for the Waupaca River is approximately 77 cubic feet per second (cfs) The preliminary PRS set by DNR is 811.80 mean sea level, 8 inches below the Ordinary High Water Mark and corresponding to approximately 60 cfs. Even though, as described above, sustained instream flows at Q7,10 are devastating to instream aquatic habitat and biota and Q7,2 is strongly recommended for consideration as PRS, DNR has chosen a PRS that is a lower flow than even the Q7,10. This, on its face, cannot protect public rights in this waterbody.

Further, there is no analysis as to how the preliminary PRS protects other public interest needs including navigation, water-based recreation and water quality preservation. At 8" below the Ordinary High Water Mark (OHWM), will navigation by canoe, kayak or other craft be reasonably protected? Is this sufficient flow to protect water quality? What does the hydrograph of the river look like throughout the year and how often might the river be reduced to this flow? And what times of the year?

The Department seems to be proposing that as long as there is a minimum water level of 8 inches below OHWM, then the Waupaca Country Club can pump as much as it needs (please note it is not clear in the public hearing notice that there is a firm cap on the maximum approved diversion). This sets the bar *below* the level known to have devastating impacts to biota and uses a "one-size-fits-all" number.

Given that there are multiple users on this river who are or may be adversely affecting flows in the river, the Department should not set the PRS at just a minimum flow or stage. Instead, the Department should set a flow regime for the river that takes into account that a river needs more than just a base minimum flow, and that other factors must be considered including important diurnal and seasonal fluctuations in flow, ramping rates (to prevent sudden drastic changes in water levels), recreational needs and other factors. For example, a diurnal flow is critical in a trout stream when fish and other species may need a nighttime temperature refuge to move around and feed. See Attachment 1B for scientific citations addressing the importance of a flow regime to protect public rights.

At a minimum, the Department should not do what it has on this river, which is to set the PRS at a level that is below a level that is, by the DNR's definition, "devastating to instream aquatic habitat and biota" (Attachment 1, section A.1. of the Handbook). A water diversion permit on the Waupaca River should not be issued unless and until the DNR determines a PRS that actually protects public rights in the Waupaca River, including navigation, aesthetic beauty, water quality and the protection of instream aquatic habitat and biota, and then determines that a diversion will not go below the PRS.

3) The DNR Should Require the Upstream Dam To Have Run-of-River Operation.

The March 30, 2006 memo describes the peaking operation of the Lighting Plant Dam and notes that: DNR has never set a minimum flow for the dam under section 31.02 of the Wisconsin Statutes; and, a Department letter dated May 19, 2005 reiterated the importance of allowing 25% of impounded flow or the approximate Q7,10 to be passed at all time, whichever is greater. This corresponds with section 31.34 of the Wisconsin Statutes which requires a minimum flow of 25% of the natural low flow (Q7,10) be released. As there is not a flow order issued on the Lighting Plant Dam the owner is required to release a minimum of 77 cfs from this dam. Your memo states that Department staff collected real-time flow data of 46 cfs below the dam on January 26, 2006. This flow is substantially below the Q7,10 flows known to have a devastating impact on biota, and is in violation of Chapter 31. How often has this occurred and for what time periods?

In 2001, the Department issued its own guidance (*Guidance – Defining and Monitoring Run-Of-River Operations for State Regulated Dams and Federal Energy Regulatory Commission (FERC) Licensed Hydropower Dams, October 11, 2001 FILE REF: 3600*) stipulating that:

Unless site-specific analysis shows that an alternate operating regime would not have serious adverse environmental impacts, run-of-river operating mode should be ordered so the dam operations are least disruptive to the normal river flow.

By your own words in the March 30, 2006, memo you state:

As a direct result of the peaking and withdrawal activities over the years, it is the Department's position that there have been measurable negative impacts to the biologic community within the Waupaca River downstream of the dam.

In order to protect public interest in the Waupaca River, the Department should issue a run-of-river order for the Lighting Plant Dam as part of setting a reasonably protective PRS.

Further, without this, the Department should deny Waupaca Country Club's diversion request, as water levels below the dam are insufficient to allow additional diversions from the river and still protect public rights.

Conclusion:

Our review of the proposal to divert water from the Waupaca River leads to the conclusion that: 1) Waupaca Country Club has been in violation of Chapter 30 for many years and DNR is remiss in enforcement of Chapter 30 requirements; 2) the Lighting Plant Dam has been in violation of Chapter 31 and DNR is remiss in neglecting to set minimum flows; and 3) a justifiable Public Rights Stage to ensure compliance with Chapter 30 has not been established and therefore a diversion permit cannot be issued.

If you would like to discuss any part of this comment letter, please do not hesitate to call Melissa K. Scanlan at 608-251-5047 ext. 3 or Helen Sarakinos at 608-257-2424 ext. 112.

Sincerely,

Melissa K. Scanlan
Executive Director
Midwest Environmental Advocates

Denny Caneff
Executive Director
River Alliance of Wisconsin

Attachment 1: Scientific Citations

A) Calculation of Adequate Minimum Instream Flows To Protect Fish and Wildlife, Water Quality, Recreation and Aesthetic Values

- Bunn, S. E., and A. H. Arthington. 2002. Basic principles and ecological consequences of altered flow regimes for aquatic biodiversity. *Environmental Management* **30**:492-507.
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B) Need for a Flow Regime Vs Single Minimum Flow/Stage to Maintain River Integrity

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- Richter, B. D., J. V. Baumgartner, J. Powell, and D. P. Braun. 1996. A method for assessing hydrologic alteration within ecosystems. *Conservation Biology* **10**:1163-1174.
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