



## Minnesota Department of Natural Resources

### OFFICE OF THE COMMISSIONER

500 Lafayette Road  
St. Paul, Minnesota 55155-4037

September 19, 2003

Ms. Marianne L. Horinka  
Acting Administrator  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, Northwest  
Washington, District of Columbia 20460

Mr. Robert E. Roberts  
Regional Administrator  
U.S. EPA Region 8  
999 18th Street, Suite 300  
Denver, Colorado 80202-2466

Mr. Thomas Skinner  
Regional Administrator  
U.S. EPA Region 5  
77 West Jackson Blvd.  
Chicago, Illinois 60604-3507

RE: North Dakota Pollutant Discharge Elimination System Permit ND 0026247  
Devils Lake Outlet

Dear Ms. Horinka, Mr. Roberts and Mr. Skinner:

On behalf of the State of Minnesota, the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources (MDNR) request that the U.S. Environmental Protection Agency (EPA) review issuance of North Dakota Pollutant Discharge Elimination System Permit ND 0026247. We request that the EPA Administrator exercise her authority to object to issuance of the permit under Section 402(d) of the Federal Water Pollution Control Act (FWPCA) and 40 C.F.R. § 123.44 on grounds that:

- (A) The North Dakota Department of Health (NDDH) failed to respond to or adopt Minnesota recommendations provided in a comment letter on the draft permit, dated 21 May 2003 (copy enclosed); and
- (B) The proposed permit is outside the guidelines and requirements of the FWPCA and the regulations promulgated thereunder.

Pursuant to FWPCA § 402(d) and 40 C.F.R. § 123.44(b)(2)(ii), EPA should state the actions that must be taken by NDDH to eliminate the objections, including the limitations and conditions which any permit should include if issued.

Pursuant to 40 C.F.R. § 123.44, the EPA Administrator's authority to object to the permit is exercised through the Regional Administrator. Therefore, references in this letter to the EPA Administrator should be understood to apply to the Regional Administrator as appropriate.

Our reasons for seeking EPA intervention are explained below.

DNR INFORMATION: 651-296-6157, 1-888-646-6367 (TTY: 651-296-5484, 1-800-657-3929) FAX: 651-296-4799



**A. NDDH FAILED TO RESPOND TO MINNESOTA RECOMMENDATIONS IN VIOLATION OF FWPCA § 402(b)(5)**

The project will affect Minnesota waters. Under the FWPCA § 402(b)(5), NDDH was required to allow Minnesota to submit written recommendations. If NDDH did not accept any part of the Minnesota recommendations, NDDH was required to notify Minnesota and the EPA Administrator in writing of its failure to accept the recommendations and its reasons for so doing. See FWPCA § 402(b)(5). Two important Minnesota recommendations were not addressed in any manner in the permit and associated documents. These include Minnesota's comment on the need for the project and alternatives to it, and Minnesota's comment on the U.S. Army Corps of Engineers (Corps) finding regarding the need for a sand filter on the federal outlet project.

1. Project need, purpose and alternatives. Normally this topic would not be considered in a FWPCA § 402 permit decision; however, we feel that exceptional circumstances apply. It is well established that exotic species have caused extensive economic and environmental damages. In making permit decisions, it is common practice to try to balance risk of damage and gain when building any particular project. In this case, it is the risk of damage from the spread of exotic species as compared to the gain in flood protection.

In fact, the need for the project is not demonstrated. Devils Lake has fallen 1.3 feet since its peak elevation in 2001, an estimated volume of water equivalent to 161,300 acre-feet of water. Minnesota's recommendation to undertake a comprehensive approach that includes an analysis of alternatives to the outlet was not addressed. Further elaboration on the merits of an alternative approach is described in Minnesota's comments on the United States Army Corps of Engineers (Corps) Final Environmental Impact Statement (EIS) (enclosed).

2. Sand Filter. North Dakota proposes to use a fish screen to prevent movement of adult fish. Decision documents for the FWPCA § 402 permit are silent on the Corps proposal to use a sand filter and silent on the Corps finding that a fish screen would be inadequate. In fact, no mention was made of the sand filter, even though it was specifically addressed in Minnesota comments. The Corps found as follows:

*“With increased use of Devils Lake for recreational purposes combined with the natural dispersal mechanisms of invasive species, the risk is extremely high that biota of concern could already be present or have a high risk of being introduced into the Devils Lake watershed at any time in the future. If biota of concern are present or invade Devils Lake the risk is also extremely high that these biota will be transferred. . . into the Sheyenne River if a preventative filtering system is not in place. . . A 3/32-inch fish screen will do little to allay these concerns and convince stakeholders that the Corps of Engineers is in compliance with the Executive Order 131121 for Invasive Species.”(ERDC, February 2003, cited below).*

**B. NDDH FAILED TO STATE ADEQUATE REASONS FOR NOT ACCEPTING MINNESOTA RECOMMENDATIONS IN VIOLATION OF FWPCA 402(b)(5)**

Pursuant to 40 C.F.R. § 123.44(b)(5), EPA is specifically authorized to object to the issuance of the permit if EPA finds that the reasons provided by NDDH for rejecting Minnesota recommendations are inadequate. Minnesota comments in its May 21, 2003 letter on the state outlet were not adequately addressed in the NDDH decision documents. The inadequacy of the response falls into two categories:

- 1 A clear failure to address the current written record regarding the topic of biota transfer risk that has been established in the EIS and accompanying technical documents for the federal outlet from Devils Lake; and
2. NDDH responses to certain issues raised by Minnesota failed to incorporate sound scientific reasoning.

The following are our responses to NDDH findings regarding biota transfer, from their Response to Comments, posted on the NDDH web site August 22, 2003:

NDDH did not consider recent, project-specific scientific studies. The research documents listed on page 15 of the Response to Comments did not include major, recent reports on biota transfer impact assessment for the federal Devils Lake outlet project. These documents are relevant because: 1) the Federal EIS is the only environmental document that has been developed for an outlet scenario; 2) the issues Minnesota is asking North Dakota to address are the same whether it is the federal or state project; and 3) COE data were used in the permit decision for the state outlet. These research documents include:

*Biota Transfer Study*, Peterson Environmental Consulting, Inc. 2002, done specifically for the Corps outlet.

*Early Detection and Rapid Response Plan for Invasive Species in the Devils Lake Watershed, ND*, 2002. Engineering Research and Development Center, Waterways Experiment Station, Vicksburg, Mississippi (ERDC, a research unit of the Corps.)

*Sand infiltration system vs. a fish screen for the Proposed Outlet Plan for Devils Lake, North Dakota*, Memorandum for Record, February 2003, ERDC.

*Potential for introducing Aquatic Nuisance Species to North Dakota by Boats*, 1999, James Grier and Jeffrey Sell, North Dakota State University, Fargo, ND.

*Final Environmental Impact Statement* prepared by the Corps for the federal outlet.

Specific NDDH responses are scientifically unsound. NDDH relied on scientifically unsound reasoning in pages 12 through 15 of the Response to Comments document, which address various aspects of the biota risk topic.

NDDH seems to rely on four generalizations in dismissing concerns about the risk of exotic species: a) the Devils Lake basin is in the Red River basin; b) connections between the Devils Lake basin, Red River basin and other basins already exist; c) the presence of an exotic species anywhere in a particular basin removes it as a concern; and d) human-caused transport mechanisms (bait buckets, etc.) are present. We have specific responses to each of these points:

- a) Both the Red River and Devils Lake are in the same drainage. NDDH states that this fact removes biota transfer as a cause for concern. We disagree. While both waters are located within the Red River Basin, Devils Lake is land locked and has discharged into the Red River of the North only about 3 times in the last 4,000 years (EIS, page 4-3.) From an ecological point of view, Devils Lake is and has been an isolated, unconnected basin. The current lake is characterized by a rich variety of habitats that didn't exist even a few years ago because the lake is so highly saline at low levels.

- b) Connections already exist between these basins elsewhere. NDDH contends that because connections already exist among many of these and other basins, another connection doesn't matter. We disagree. Many exotic species control programs and laws throughout North America manage infestations where there are existing connections between basins. For example, "*The National Invasive Species Act of 1996 called for the (Corps) to install a demonstration dispersal barrier to prevent the spread of aquatic nuisance species through the Chicago Sanitary and Ship Canal portion of the Illinois waterways*" (Minnesota Department of Natural Resources Annual Report 2001, Harmful Exotic Species of Aquatic Plants and animals in Minnesota). This barrier is to prevent the Round Goby from moving into the Mississippi drainage from the Great Lakes. Recent discussions of additional protections in this waterway are being driven by the presence of Asian Carp in the Mississippi Drainage.
- c) The presence of an exotic species in a particular drainage negates concerns. NDDH states that if an exotic species is found somewhere in a drainage, even at long distances from a particular project, there is no longer a need to be concerned. We disagree. If one follows this logic, there should be no concern about the presence of European Zander in Spiritwood Lake in the James River drainage of North Dakota near Jamestown, if this species were to be released into a single lake or reservoir at the southern end of the Missouri River watershed.

In fact, North Dakota clearly expressed concern about containing this species in a recent letter to Minnesota. Responding to a request from Minnesota, Director Terry Steinwand of the North Dakota Game and Fish Department stated: "We are in the process of attempting to prevent movement of fish species into and out of Spiritwood Lake. . . The most current plan is to *maintain the closed basin nature of Spiritwood Lake* by pumping water to another closed basin to the west." (July 25, 2001 letter to Ron Payer, Emphasis added.)

- d) Bait buckets, boats, and other methods of movement. NDDH states that there is no cause for concern about the project causing the spread of exotic species because human-caused mechanisms are present that increase the chances of movement of exotic species. We disagree. The movement mechanisms listed in the decision documents are mechanisms that exist in nearly every river basin in North America; if these were as material to this decision as contended by North Dakota, there would be no programs to control exotic species.

**C. NDDH PROPOSED PERMIT WILL ALLOW DISCHARGE OF "POLLUTANT" IN VIOLATION OF FWPCA § 301 (a)**

Section 301(a) of FWPCA prohibits the discharge of "pollutants" except as specifically authorized. The biota of concern are within the definition "pollutants" under federal law and the laws of both Minnesota and North Dakota.

Biological materials regulated as pollutants. One of the primary purposes of the FWPCA is the restoration and maintenance of the "biological integrity of the Nation's waters"(FWPCA § 101(a)). "Pollutant", as defined in FWPCA § 502(6) includes "biological materials." Minnesota state law includes "biological materials" in its definition of "other wastes." Minn. Stat. § 115.01, Subd. 9. Minnesota's position is that the introduction of any exotic species not naturally occurring in the waters comes within the definition of pollutant. One federal court has held that "Fish that do not naturally occur in the water...fall within the term 'biological material' and are therefore pollutants under the [Clean Water] Act." *U.S. Public Interest Research Group v. Atlantic Salmon of Maine, LLC*, 215 F.Supp.2d 239, 247 (D. Me. 2002).

North Dakota has similar language in its water quality regulations. *See North Dakota Administrative Code § 33-16-01-01(3)(t)*. In fact, NDDH's requirement for a fish screen as a condition in their final permit can be interpreted as recognizing that biological materials are a pollutant whose discharge must be controlled by this permit.

2. High probability of exotic species transfer from the state outlet project.

Both the federal and state Devils Lake outlet projects create the same new physical connection between Devils Lake and the Sheyenne River and therefore present the same opportunities with respect to the risk of biota transfer. Key information is found in the EIS. On risk probability and sufficiency of information, the following statement is typical:

*"The increased use of Devils Lake for recreational purposes, combined with the natural dispersal mechanisms of invasive species, results in an extremely high risk that biota of concern could already be present or have a high risk of being introduced into the Devils Lake watershed at any time in the future. If biota of concern are present or invade Devils Lake, the risk is also extremely high that these biota would be transferred. . .into the Sheyenne River if a preventative filtering system were not in place." (P. 6-69, EIS.)*

The technical reports upon which the EIS language is based are the Peterson Environmental Report (Peterson Environmental Consulting, Inc. 2002), and the ERDC report cited above. The Peterson Report states that based on *known information*, it appeared unlikely that downstream habitats would suffer substantially—however, **known available information was inadequate**: *"Perhaps the most important finding of this study was the revelation of just how poorly the biota of the Devils Lake basin and (to a somewhat lesser extent) the Red River basin are known."* (Page v.)

Furthermore, the Peterson Report listed specific actions that needed to be implemented to address exotic species concerns prior to operation of the outlet: *" . . .chemical and algal monitoring programs should accompany the outlet project, fish pathogen screening should be implemented (already underway), and that surveys for the following invasive species (at a minimum) should be carried out in Devils Lake before the outlet begins operation: striped bass juveniles, rusty crayfish, spiny water flea, zebra mussel, and Chinese mystery snail and relatives."* (Page viii, emphasis in the original).

#### D. NDDH PROPOSED PERMIT WILL VIOLATE MINNESOTA WATER QUALITY STANDARDS IN VIOLATION OF FWPCA

The FWPCA prohibits NDDH from issuing a permit in violation of Minnesota water quality standards (see FWPCA § 301 (b) (1) (c)). The applicable regulations prohibit NDDH from issuing a permit "[w]hen the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected states." *See 40 C.F.R. § 122.4 (d)*. It is Minnesota's contention that transfer of harmful biota into Minnesota, or other adverse impacts to Minnesota's native biota as a result of the project, would violate the following Minnesota narrative water quality standards:

Minnesota Rules 7050.0150, Subp. 3.

"...the aquatic habitat, which includes the waters of the state and stream bed, shall not be degraded in any material manner, there shall be no material increase in undesirable slime growths or aquatic plants, including algae, nor shall there be any significant increase in harmful pesticide or other residues in the waters, sediments, and aquatic flora and fauna; the normal fishery and lower aquatic biota upon which it is dependent and the use thereof shall not be seriously impaired or endangered, the species composition shall not be altered

materially, and the propagation or migration of the fish and other biota normally present shall not be prevented or hindered by the discharge of any sewage, industrial waste, or other wastes to the waters.”

2. Minnesota Rules 7050.0220, Subp. 13.

“No sewage, industrial waste, or other wastes shall be discharged from either a point or a nonpoint source into the waters of the state in such quantity or in such manner alone or in combination with other substances as to cause pollution as defined by law.”

3. Minnesota Rules 7050.0222, Subp. 7.A.

“No sewage, industrial waste, or other wastes from point or nonpoint sources shall be discharged into any of the waters of this category so as to cause any material change in any other substances or characteristics which may impair the quality of the waters of the state or the aquatic biota of any of the classes in subparts 2 to 6 or in any manner render them unsuitable or objectionable for fishing, fish culture, or recreational uses.”


#### E. SUMMARY AND CONCLUSIONS

Minnesota requests that, during its review, EPA re-evaluate alternative means available for achieving the project purpose. One of Minnesota’s principal concerns is that the Devils Lake state outlet, as currently proposed, would have minimal impact on removing water from Devils Lake. A project alternative that addresses the need for infrastructure protection and upper basin storage is, in Minnesota’s view, a preferable way to address the wet weather issues for Devils Lake. This approach is the least environmentally damaging. It would provide expanded infrastructure protection around the lake, additional water management and storage in the upper parts of the watershed and additional flood protection. It would also provide more reduction in the Devils Lake water levels than the minimal 1.7 inch per year reduction proposed under the NDPDES permit.

The risk of biota transfer is also a major concern to the state of Minnesota. For more than a decade, over one million dollars per year has been directed at an array of statewide activities designed to educate citizens, to control and manage exotics species infestations, to enforce state rules regarding the transport of exotic species, and to conduct new research on control techniques. Because of our aggressive approach to minimizing the spread and impact of exotic species, we have serious concerns about projects in neighboring states that have the potential to compromise our actions. We strongly recommend that any permit or any analysis of an outlet alternative, if pursued, must include evaluation of a sand filter system comparable to that conceptually designed by the Corps of Engineers for the federal project, along with applicable operating, exotics monitoring (in and downstream of Devils Lake), and contingency planning.

Thank you for considering our request.

Sincerely,



Gene Merriam, Commissioner  
Minnesota Department of Natural Resources



Sheryl Corrigan, Commissioner  
Minnesota Pollution Control Agency

**Enclosures: State comment letter on ND water quality permit (5/21/03)  
State comment letter on Corps FEIS (6/19/03)**

**cc: Mr. L. David Glatt, North Dakota Department of Health  
Mr. Curtis Stone, U.S. Embassy in Ottawa  
Mr. Tracy Mehan, U.S. Environmental Protection Agency  
Governor Tim Pawlenty  
State of Minnesota Delegation**