PEQUAYWAN LAKES ASSOCIATION

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Tom Peterson
Area Supervisor
DNR Parks and Trails Division
1568 Highway 2
Two Harbors, MN 55116

Dear Mr. Peterson,

Thank you for responding to our letter and our Lake Association resolution expressing concern and opposition to the proposed DNR public access on either Lake Pequaywan or Lower Pequaywan (Smith Lake). Based on your response, we have some further questions and would appreciate clarification.

We are pleased that you appreciate our deep concern for the threat posed by invasive species of all types to our state's lands, lakes and streams. It is due to that concern that we view a public access on our lakes as the primary threat to their ecological health for the following reasons:

A public boat access is the primary way that invasive, exotic species are spread from lake to lake.

You said in your letter that of the more than 200 lakes that have milfoil in Minnesota, 25 percent have no public access and 75 percent of lakes that are infested have public access. However, this does not represent an accurate picture of the risk of a public access. To say that 25 percent of lakes that are infected with MilFoil do not have public accesses as a way to minimizing the impact of public accesses is disingenuous.

According to a January 27, 2009, document on the DNR website (http://files.dnr.state.mn.us/eco/invasives/infestedwaters_newmilfoil.pdf) which lists 219 bodies of water infected by milfoil, there are 57 listed that have no public access; 12 of those 57 are either a pond or a wetland (Lakewood Cemetery is listed as a lake but it is a pond), and two are rivers.

Further, the list does not indicate whether these lakes share water with lakes that are infested, are in very close proximity to those that are infested, or are connected to those with a public access. Also, many of the lakes listed are in heavily residential areas in Minneapolis/St. Paul and their suburbs and are surrounded by houses lawns, freeways and office buildings. Several have city- or county-owned accesses. Some have rivers flowing into them that come from infested lakes. Some contain water from the Mississippi River. Here is just a sampling of the reason some of these lakes on the list without DNR accesses are infested:

- Mink Lake is connected to infested Buffalo Lake, which has a public access.
- Ellen Lake is just across the road from Green Lake in Chisago County.
- LacLavon and North Lindstrom lakes have has a city-owned access or are in a city-owned park.
- Vadnais Lake contains water from the Mississippi River.
- Sucker Lake is connected to Vadnais Lake
- Cenaiko Lake has fishing piers and is adjacent to the Mississippi River.

- Gilbert Pit Lake has a city boat launch.
- Arrowhead in Hennepin County has Edina city access.
- McKinney Lake in Grand Rapids has city access.
- Powers Lake has a park, and motorized canoes are permitted.
- Weigand Lake connected to Clearwater River, which is infested.
- Twin Lakes is in a densely residential and office area, as is Round Lake.
- Caroline Lake can be accessed from the Clearwater River which is infested.

We could go on, but we think the facts speak for themselves — if you have a public access or are connected to a public access lake, the chances of your lake being infected with Milfoil is very, very high.

In fact, lakes with public access have a rate of Milfoil infestation that is 20 times that of lakes without public access.

Perhaps even more compelling is the issue of Zebra Mussels. If you look at the list of lakes that have Zebra Mussels and examine whether they have a public access, the story is even more clear. Of the lakes that the DNR has identified as being infested with Zebra Mussels, nearly all have public accesses, are connected to a lake that does or have river water such as Lake Vadnais (as part of the St. Paul water system). See attached list.

The situation with Spiny Water Fleas in St. Louis County (just to pick one county) illustrates this point. This is a list of the lakes that are infested with Spiny Water Fleas:

	Public Access/Connection
Crane Lake 69-0616	Yes
Fish Lake 69-0491	Yes
Island Lake 69-0372	Yes
Kabetogama Lake 69-0845	Yes
Lac La Croix 69-0224	Part of chain that is infested
Little Vermilion Lake 69-0608	Yes
Loon Lake 69-0470	Yes
Namakan Lake 69-0693	Connected through Crane, etc
Rainy Lake 69-0694	Yes
Sand Point Lake 69-0617	Connected through Crane, Little Vermilion and Kabetogama

We are not alone in seeing this obvious connection between public accesses and infestation of lakes.

Environmental Sentry LLC has studied the issue and produced a map that "reflects the 'trampoline' effect of Lake Minnetonka becoming initially infested in 1987 with boaters trafficking AIS to other parts of the state."

Their map shows that "established and newly infested waters are located along roadways. This evidence and reports of Milfoil initially propagating a lake near the boat launches point to transportation by boats and trailers traveling between water bodies as the key vectors."

(http://www.environmentalsentry.com/Analysis of Eurasian Watermilfoil Spread-small.pdf)

A study done at Lake St. Clair, Michigan, boat launches in 2001 found:

> "Predictions of the geographic spread of introduced species are often limited by a lack of data on their mechanisms of dispersal. We interviewed boaters and inspected boating equipment at public boat launches on Lake St. Clair (Michigan, USA) to assess the potential for the zebra mussel, an invasive bivalve, to be dispersed overland to inland waters by transient recreational boating activities. Several mechanisms associated with recreational boating were found to be capable of transporting either larval or adult life stages. Larvae were found in all forms of water carried by boats (i.e., in live wells, bilges, bait buckets, and engines) but were estimated to be 40–100× more abundant in live wells than other locations. Dilution in receiving waters should, however, greatly reduce the risk of establishing new populations by the introduction of larvae. Contrary to common belief, mussel dispersal from these boat launches did not occur by direct attachment to transient boats. Rather, adult and juvenile mussels were transported primarily on macrophytes entangled on boat trailers and, less frequently, on anchors (5.3% and 0.9% of departing boats, respectively). Combining these data with estimates of survival in air and reported boater destinations, we predict that a maximum of 0.12% of the trailered boats departing these access sites delivered live adult mussels to inland waters solely by transport on entangled macrophytes. While this is a small probability, high levels of vector activity resulted in a prediction of a total of 170 dispersal events to inland waters within the summer season from the primary boat launch studied. Many other potential vectors remain to be assessed, but the dispersal of zebra mussels by trailered boats, particularly by "piggybacking" on macrophytes entangled on the trailers, must be controlled in order to limit further range expansion of the zebra mussel within North America.
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> http://www.esajournals.org/doi/abs/10.1890/1051-0761%282001%29011%5B1789%3AODOAIS%5D2.0.CO%3B2?journalCode=ecap

And recognizing how these species are spread, the National Park Service has banned boat travel to protect the interior lakes in the Voyageurs National Park.

Even the DNR itself recognizes that boaters are the primary threat:

A. Efforts to prevent the spread of invasive species within Minnesota are focused on people and their habits. After an invasive species becomes established in our lakes and rivers, ***a primary means for its spread to other waters is the unintentional transport on boats, trailers, and other recreational equipment.***

   files.dnr.state.mn.us/eco/invasives/annualreport_summary.pdf

B. "The DNR has increased monitoring at boat launches this summer to try to prevent boaters from spreading zebra mussels to other lakes. Boaters can be fined for not cleaning off weeds that might hold adult zebra mussels, or for not draining livewells and bilges."

   > Microscopic zebra mussel larvae float in the water, so they can be spread by transporting water from an infected lake (http://www.startribune.com/sports/outdoors/57571157.html?page=2&c=y)

It is very clear that current containment methods are not working.

In your letter you speak of the principal goals of the Invasive Species Program to prevent the spread of invasive species within Minnesota. Yet your plan to put new public accesses on lakes not yet infested is totally contrary to that goal.

There are too few inspectors for the number of accesses and boats. The inspectors cannot be at every access all of the time. According to the DNR Website, there are more than 2,000 accesses, 800,000 boats and 80 inspectors. Do the math... there is no way that inspection is going to stop the spread. In addition, the microscopic nature of some of the

species means they are nearly impossible to find during an inspection. And water containing these invasives can be in boat trailers, boat motors, bait buckets and livewells.

> "Minnesota's situation isn't hopeless, said Luke Skinner, Minnesota DNR invasive species program supervisor. But the recent discovery of zebra mussels in four more Minnesota lakes — Prior in Scott County, Pike near Duluth, Le Homme Dieu in Alexandria and Rebecca near Hastings — underscores the difficulty of stopping the spread of a critter that in its larval form can be seen only with a microscope. They attach themselves to weeds, boats, docks or any solid objects. What's more, they're difficult to kill: A zebra mussel lived out of water in the DNR's Aitkin office for 10 days.
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> August 5, 2009. Fergus Falls Lakes Journal Online
> *Thousands of little mussels ... One big issue: If you care about lakes and fishing in Minnesota, then you care about the threat from zebra mussels*.

Boat washing at accesses is not an plausible solution. According to Douglas A. Jensen, University of Minnesota Sea Grant Program, "washing did not remove 100% of aquatic vegetation."

Why take the risk?

Given the growing spread of these species in recent years and the destructive havoc they have on lakes and fisheries, why are we taking the risk to continue this spread through the addition of new accesses when we can't inspect boats at the ones we already have. Isn't it time for a NEW approach based on current conditions and the number of invasive species and infected lakes? Do we really want to keep on just adding more and more lakes to the list of infested lakes each year? Has the DNR given up?

> "So what does it mean to strategically prevent the spread of aquatic invaders? Recent scientific research sheds some light on this question.
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> "Dr. David Lodge and his research group at the University of Notre Dame have been looking for the most effective ways to keep aquatic invasive species from spreading, and their findings have profound management implications.
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> "John Rothlisberger, a PhD student in Dr. Lodge's lab and one of the lead researchers in this work, explains that they set out to evaluate two common prevention approaches – containment and shielding. "In dealing with an invasive species, you can either contain it and focus your effort on keeping it from moving anywhere else, or you can shield the other places that it might spread to, focusing your efforts on keeping it out of those places. You can think of it as going on the offense (containment) versus playing defense (shielding)."
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> "The defense or "shielding" approach is a common one – if you live on a lake that doesn't have invasive species, it is natural to want to keep them out, and the most obvious way to do that is to keep them from being introduced into that lake by incoming boaters. Rothlisberger agrees that if the goal is protecting a single lake, then, shielding is an effective tool."
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> http://dnr.wi.gov/wnrmag/2009/08/carp.htm

It seems that any reasonable person would look at the facts we have laid out here and come to the conclusion that it makes sense to stop adding new public access which will increase the spread of invasive species into clean lakes and instead take those resources and find a solution for the lakes that are already infested. Until a real solution is found to contain these species, we are just playing Russian Roulette with other lakes.

The compelling need to stop the destructive spread of these species, which can ruin lakes, is certainly much greater than any compelling need for new accesses when there are already so many available. We sincerely hope that this is not simply a matter of the Trails and Waterways Division having too great of a flow of funds, because of the Constitutional Amendment, so it feels the need to spend it on new accesses. We suggest some of these funds be channelled to helping property owners on already infested lakes to control current infestations, thus lessening (though not eliminating) the likelihood they will be further spread. ***And, isn't it ironic that Milfoil removal permits have been raised recently, due to a lack of funds?***

(By the way, you mention in your letter the increased population in the lakes area. We are assuming that you are not referring to this area, since both St. Louis County and Lake County have seen population decreases according to the U.S. Census, as has Duluth.)

In conclusion, we ask that the DNR reconsider its current policy on expanding public boat accesses until it can better protect the lakes that are not infested and help mitigate the problem in lakes that are already infested. This not only seems extremely logical, it seems the only sound ecological path to take.

We would also like to remind you that our elected township supervisors have passed a resolution against new public accesses.

We look forward to further discussion with you on this important matter.

Phyllis Mead, President
Richard Arndt, Vice President
Judith Strom, Vice President

cc. Senator Satveer Chaudhary
Senator Tom Bakk
Luke Skinner, Supervisor, DNR Invasive Species Program
Courtland Nelson, Director, DNR Parks and Rec
Mark Holsten, DNR Commissioner
Members of the Pequaywan Lake Association
Dick Osgood, Minnesota Waters, Officer & Public Policy Chair