# WISCONSIN ASSOCIATION OF LAKES, INC.

*is a nonprofit group of citizens,*
*organizations, and businesses working for clean, safe, healthy lakes for everyone.*

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August 2, 2006

To Senator Dan Kapanke, Chair Committee on Agriculture and Insurance
To Representative Alvin Ott, Chair Committee on Agriculture

**Re: Proposed revisions to Manure Management Discharge Rules (NR 243)**

Members of the Senate and Assembly Agricultural committees:

The Wisconsin Association of Lakes represents more than 350 lake organizations and 100,000 waterfront property owners working to keep Wisconsin's 15,000 lakes safe, clean, and healthy for everyone.

The quality of our lakes is dependent on the health of their watersheds. Nothing has a more profound effect on our lakes than the decisions we make on how we use the land that surrounds them. We need everyone's help within the watershed to keep our lake's water quality safe and pleasant to enjoy and use. It is important all farmers practice sound manure management to protect our watersheds and lakes.

Wisconsin's largest farms produce disproportionately more manure and can therefore cause more severe impacts in the event of a spill. Updating manure standards for our largest farms is necessary to address public health and natural resource damage caused by manure spills. Most of the largest farms already take many of the steps called for in the proposed revision: the changes would bring operations that lag behind in their practices up to the same standards their farming neighbors have put into practice.

Manure runoff from fields and/or detention ponds can cause short-term and long-term problems for our lakes.

## *Manure runoff: short-term effects, long-term problems*

A sudden flood of nutrients from manure runoff events can trigger fish kills, and provide the fuel for reoccurring, smelly algae blooms. Dramatic changes in water quality can choke out native species and open up the door for invasives—such as Eurasian water milfoil—to become established in the lake[1].

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[1] Elena Bennett and Steve Carpenter. *P Soup*. World Watch. March/April 2002.

Spreading manure on saturated lake watershed soils can cause water quality decline that can be difficult, and sometimes impossible to reverse. Like balancing a scale, a chronic source of extra nutrients can tip lakes from clear water into a murky, eutrophic state that makes recreation unpleasant and drags down lakefront property values.

A recent study on Squaw Lake[2] found that 40% of the phosphorus load entering the lake was coming from winter spread manure. This is a problem that has a solution, but we need good rules like proposed NR 243 to help us work together towards healthier lakes.

## *Undermining public and private investment*

Manure pollution undermines the private and public financial investments in stream and lake improvements property owners and taxpayers are making to keep our lakes clean, safe, and healthy. Property owners bear an undue burden when their lake quality and property values decline because of pollution elsewhere in the watershed.

Unfortunately, there are many examples across Wisconsin where nutrients from manure sources are contributing to lake water quality and property value decline.

## Dane County: Dorian Creek (Tributary to Lake Mendota)

In February 2005, a manure runoff event from one eighty acre field contributed enough phosphorus to Lake Mendota to produce 1.2 million pounds of algae.

The manure was spread on frozen ground, and it is estimated all of that manure ran off the field during the rapid thawing and rain events that spring, dumping into Dorian Creek. Virtually all the phosphorus from that manure runoff event ended up in Lake Mendota.

This **one** runoff event into **one** lake was the equivalent of the amount of phosphorus that Dane county's lawn fertilizer phosphorus ban prevents from entering **all** of the county's lakes.

Dane county is making significant investments to reduce the amount of phosphorus entering the lake system. Between 1997 and 2004, the agricultural community has received $692,000 cost shared dollars[3] to install best management practices to limit runoff. Dane county park staff estimate 80% of the County's limited weed harvesting program ($188,560) is spent on Madison's lakes.

For Lake Mendota alone, the cost of eutrophication has been estimated to be about $50 million in lost recreation and property values.[4] Almost 55% of the phosphorus entering the Lake Mendota watershed comes from fertilizer, which includes manure.[5]

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[2] Squaw Lake is located in St. Croix County. This study identified all sources of phosphorus inputs to the lake. Agricultural cropland and winter spread manure accounted for almost all of the phosphorus inputs into the lake. When the watershed farmers changed how they handled their manure and changed their dairy herd's diet the phosphorus contribution to the lake was reduced to 0%.

[3] Note these figures represent state and federal cost share dollars paid out to farmers. They do not include County staff time to administer the program, nor the amount farmers are contributing to complete runoff control projects.

[4] Elena Bennett and Steve Carpenter. *P Soup*. World Watch. March/April 2002.

## Vernon County: Jersey Valley Lake

In March 2005, a manure runoff event transformed Jersey Valley Lake from a popular fishing and recreation spot to a dead zone. Liquid manure was spread on seven inches of fresh snow; then it rained.

The resulting manure runoff depleted the amount of oxygen in the water by two-thirds, suffocating all the lake's fish. Visibility, usually 18 feet, was reduced to less than a foot. Subsequent tests found the lake contaminated by coliform and E-coli bacteria. The swimming beach became a public health risk rather than a summer destination.

The County was forced to draw down the lake. What was a 52 acre 32 foot deep lake is now a 5 acre mud puddle. Once a popular fishing spot with abundant large mouth bass and panfish[6], the manure runoff event killed all Jersey Valley Lake's fish[7].

Jersey Valley Lake was one of the few publicly available bodies of water in Vernon County. A county survey found that local people used to log more than 300 recreation hours a day in the summer at the lake. Now the lake and the park are closed. As one Vernon County employee commented, "There aren't any grandpas fishing with their grandkids there anymore. How do you measure that?"

## Dodge County: Lake Emily

Lake Emily, located in Dodge County, used to be a beautiful lake, but not anymore. In the spring of 2002, a local farm applied 1 million gallons of liquid manure without knifing it in to the fields.

A couple of days of rain followed. According to residents, the roads were so full of manure that driving was difficult. The manure runoff went into a retention ponds and Lake Emily.

Lake Emily is a small, shallow lake that used to be really clear. Now residents describe their lake as a weedbed so thick that cranes can walk across it. The weeds have caused boating problems: motors can't chop through the thick beds.

Accessing the shoreline is so difficult that people are having trouble fishing, however the fish population has declined with the water quality. Large mouth bass were abundant and northern pike common[8] before the runoff event; now residents observe a marked reduction in the number of fish in their lake.

The dramatic change in water quality has also changed the plants able to survive in the now nutrient laden lake. Both curly leaf pondweed and Eurasian water milfoil—aquatic invasive

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[5] Elena Bennett, et al. *A Phosphorus Budget for the Lake Mendota Watershed*. Ecosystems. 1999.

[6] Wisconsin Lake Book. Available online at http://dnr.wi.gov/org/water/fhp/lakes/list/#lakebook

[7] Matt Johnson. *The death of Jersey Valley Lake: No recreation for two years*. April 20, 2005 Vernon County Broadcaster. Available online at http://www.midwestadvocates.org/archive/manure%20on%20frozen%20ground/media/4-20-05%20jersey%20lake.htm

[8] Wisconsin Lake Book. Available online at http://dnr.wi.gov/org/water/fhp/lakes/list/#lakebook

species—have become established. Both Curley leaf pondweed[9] and Eurasian water milfoil thrive in lakes receiving phosphorus laden runoff[10].

The local lake association is small, and does not have the funds for the costly management it will take to change the water from a pond of pea soup back into a clear lake. In 2005, three years after the spill, private property owners were spending more than $500 each to chemically treat weeds so their properties are usable.

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[9] Wisconsin Department of Natural Resources online invasive species factsheets, available online at http://dnr.wi.gov/invasives/fact/curlyleaf_pondweed.htm

[10] Wisconsin Department of Natural Resources online invasive species factsheets, available online at http://dnr.wi.gov/invasives/fact/milfoil.htm

## *We support strong manure management discharge rules.*

Manure runoff is a problem that has a solution, but we need strong Manure Management Discharge Rules (NR 243) to help us work together towards healthier lakes. On behalf of the Wisconsin Association of Lakes, we support the following to help Concentrated Animal Feeding Operations (CAFOs) better manage their manure and protect Wisconsin's waters:

1. **We have waited long enough.** The DNR's rulemaking process has lasted almost four years - it is time to stop delaying, finalize these rules, and implement them as soon as possible so that Wisconsin can begin to effectively prevent contaminated drinking water and fishkills.

2. **Wisconsin's proposed rules are *not* more stringent than those of other states.** Wisconsin does ***not*** regulate CAFOs more stringently than other states. Like Wisconsin's proposal, many states have restrictions on manure spreading on frozen and snow-covered ground; several states require 6 months of manure storage; and several states have retained the mixed animal unit calculation method.

3. **Permits prevent pollution.** All Large CAFOs currently must apply for Wisconsin Pollutant Discharge Elimination System permit because of actual groundwater contamination, and the risk of surface water contamination. This is a long standing practice – since 1984 – that works, is used by other states, and needs to be continued. If permits are no longer required, the legislature will be threatening Wisconsin's rural families with the increased risk of manure-laden tapwater and destroyed fisheries.

4. **Don't weaken the ban.** Agribusiness concerns and interests were taken into account and are reflected in the proposed rule. The DNR's winter manure spreading restrictions are reasonable and should ***not*** be modified or weakened any further.

5. **Make every cow count.** The DNR's proposal to retain the mixed animal unit calculation – that counts all animals at the CAFOs - should ***not*** be watered-down. Refusing to count some cows and not others makes no sense, disregards almost 25 years of experience by the state, and ignores Wisconsin's uniquely diverse farms and water resources.

6. **Don't bet on the weather.** The DNR should remove the agricultural stormwater exemption, a confusing provision that exempts manure spills from enforcement when those spills were caused by rain - and the CAFO complied with its manure management plan and DNR rules. That means a CAFO's compliance with the law will depend, in part, on the weather. Anyone who knows Wisconsin weather also knows that this could make compliance and enforcement a confusing and uncertain process for the public, the DNR, and CAFOs.

Respectfully submitted,

Peter Murray, Executive Director