

2024 Impaired Waters List

Comments website would not accept my submission.

Per phone message from Leya Charles, 1/16/24,

These are sent by email to: Leya.charles@state.mn.us

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2024 Impaired Waters List

1/12/24 8:30 pm

Maureen Johnson

Scientist, Retired from MPCA

I retired from the Superfund Program after almost 20 years of leading teams to clean up major pollution sites. Permits enforcement is still a problem since 1985: MPCA considers NPDES/SDS permittees as its "customers" who have more value than the 5 million people of Minnesota and their lakes and streams quality, as evidenced by the facts that:

- *the MPCA avoids enforcing its permits,

- *the MPCA avoids creating permits that will protect Minnesota waters,

- *the MPCA avoids listing waters obviously impaired by industry including Dark Lake polluted by Minntac,

- *the MPCA has been found guilty of hiding important permitting information adverse to their industrial clients.

and

- *the number of polluted lakes and waters continues to rise.

Ground water is usually ignored, but climate change may encourage people to take care of all their water sources, and they may find MPCA has purposefully ignored their groundwater too to help industrial "clients."

This bad performance by MPCA results in the fact that our waters are mostly becoming worse in quality and the people are going to have to pay for industrial pollution much of which MPCA could have prevented from the beginning. That the public must pay is evidenced in the TMDL work being done by MPCA at public expense where industry is not being held responsible for its contributions to the various

types of pollution including mercury. NPDES permits do not even require mercury, sulfate, fish methylmercury, and other monitoring in sufficient planning to be scientifically credible.

The MPCA administration must give the TMDL program power to get deeper involved in the permitting process and to compel permit changes to have a significant impact. That is what the TMDL is about – TOTAL MASS DAILY LOAD of mercury and pollutants that cause increases in methylmercury must also be reduced in proportion to that which is contributed by the permittees, while the diplomats must obtain cooperation from the outstate contributors for the remainder.

All impaired waters, listed or not, are at risk of losing sensitive invertebrate and plant populations that are the base of our familiar food webs for edible fish and water-dependent animals like ducks, amphibians and moose. This makes us our own worst enemy, so I, as a citizen scientist, am asking MPCA to include sulfate and mercury limits in the permits discharging to state waters. The MPCA must also honestly and straightforwardly list Dark Lake near MinnTac, and all other lakes which are documented to be impaired, especially wild rice waters.

I also note that MPCA discusses "mercury loading" without clearly stating that the loading must address critical "methylmercury loading" facilitated by sulfate, which the Minnesota Department of Health has documented thousands of children may not meet their full potential due to the fact that every molecule of methylmercury that enters their brain or other organ will cause damage. The Department of Health has studied babies in the area of Duluth and found that 10% exceed the health limit.

Elemental and Methylmercury is toxic to the central and peripheral nervous systems. Symptoms of methylmercury poisoning may include:

- Loss of peripheral vision
- "Pins and needles" feelings, usually in the hands, feet, and around the mouth
- Lack of coordination of movements
- Impairment of speech, hearing, walking
- Muscle weakness

High levels of methylmercury in the bloodstream of babies developing in the womb and young children may harm their developing nervous systems, affecting their ability to think and learn.

[Health Effects of Exposures to Mercury | US EPA](#)

www.epa.gov/mercury/health-effects-exposures-mercury

This human suffering is difficult to diagnose but has been shown scientifically to exist.

Birds and mammals that eat fish have more exposures to methylmercury than other animals in water ecosystems. Predators that eat these birds and mammals are also at risk. Methylmercury has been found in eagles, otters, and endangered Florida panthers. At high levels of exposure, methylmercury's harmful effects on these animals include:

- Death
- Reduced reproduction
- Slower growth and development
- Abnormal behavior

I support all of WaterLegacy's recommendations in response to this request for comments. They are based on science and fact.

Sincerely,

Maureen Johnson