Message

From: Swenson, Peter [swenson.peter@epa.gov]
Sent: 6/4/2018 6:45:48 PM
To: Melgin, Wendy [melgin.wendy@epa.gov]; Wester, Barbara [wester.barbara@epa.gov]
Subject: FW: indirect
Attachments: MinnPostLink.docx

fyi

From: Helgen, Judy [mailto:helge018@umn.edu]
Sent: Monday, June 04, 2018 1:37 PM
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Subject: indirect

Here are my comments in MinnPost commentary run May 24 about indirect wetlands impacts. A new complication arises because of their "expansion" plan which will almost quadruple the tonnage mined per day (from 32k to 118k).

Wetlands impact: PolyMet mine's potential for destruction is massive and unprecedented

By Judy Helgen | 05/24/18

Federal and state laws require that unavoidable wetlands and water quality impacts, if properly mitigated, must be certified by both the Minnesota Pollution Control Agency (MPCA) and the U.S. Army Corps of Engineers.

Wetlands are calling: *Please protect us from mining!*

PolyMet's proposed copper-nickel mine in northeastern Minnesota could have major impacts on wetlands in a region known for high quality and diverse bogs, fens, swamps, and ponds. The mine's potential for destruction is massive and unprecedented.

Federal and state laws require that unavoidable wetlands and water quality impacts, if properly mitigated, must be certified by both the Minnesota Pollution Control Agency (MPCA) and the U.S. Army Corps of Engineers. The permit review is now under way at the MPCA. If it certifies the project, after reviewing public comments, then it goes to the Corps for final approval.

Direct and indirect impacts

PolyMet's lengthy wetlands permit request openly states that 930 acres will be destroyed by the mine, the equivalent to 705 football fields. They also suggest that an additional 7,694 acres of wetlands could be "indirectly impacted," for example by groundwater drawdown or water pollution. To put this in perspective, that's another 5,829 football fields. To mitigate for destruction of wetlands, PolyMet can purchase "credits" from the state's wetland banking system, administered through the Board of Water and Soil Resources (BWSR),

to compensate for losses. These banked credits will cost PolyMet $822 per acre. For the worst-case total of direct and indirect loss of 8,624 acres of wetlands, PolyMet could be billed for more than $7 million.

Which is why PolyMet has worked hard to reduce its estimates of indirect harm to wetlands in its permit application. More than 7,400 of the 7,600 indirect acres were excluded because they might suffer only from one or two potential factors, like groundwater or water quality changes, rather than four or five factors. PolyMet called the peatlands "bogs," and then classified them as raised bogs, the type fed only by rain and not susceptible to groundwater or surface water quality changes. According to one scientist, the peatlands are fens, not bogs. Fens are fed by mineral-rich surface water and groundwater, which means they are vulnerable to mining impacts.

Now factor in the recent suggestion that PolyMet may increase its mining operation far beyond the proposed excavation of 32,000 tons of material per day to an astounding 118,000 tons per day (see Lee Schafer, Star Tribune, April 2, "Forecast unlikely to thwart PolyMet"). This "expansion plan" poses a 3.7 times increase beyond the scope of PolyMet's current permit. It is touted as a way the mine might gain more profitability, now that its projected earnings are lower.

How many more wetland acres might be harmed by this expanded mining activity?

According to the MPCA, it has not received any revised permit applications from PolyMet for an increase in project scope or size. If PolyMet submits a request for increased production in the future (beyond the proposed 32,000 tons per day), then the MPCA would do another evaluation of the air and water impacts. But not now.

Wetlands seen as poor cousins

For many, wetlands are the poor cousins of more highly prized waters in Minnesota, where over 90 percent have been drained for cropland in the southwest. The majority of wetlands surveyed using biological methods by the MPCA had poor water quality. At best, wetlands are prized as a place to hold pollution and sediments to protect downstream waters. The current use of the "drain the swamp" metaphor for bad politics, a bizarre slap at wetlands at best, derives from the ingrained belief that wetlands have little value or might even be dangerous.

But waterfowl hunters, many farmers, bird watchers, and kids who wade in ponds and chase frogs, along with the heroic citizens who volunteer to determine wetland biological health in the metropolitan area (see mnwhep.org) believe otherwise: Wetlands are beautiful, even magical; they support a broad diversity of plant and animal life. Many of us resonate to the spirit of wetlands especially during spring, when birds and frogs call out and inspire us to protect them from harm. Or try.

Judy Helgen, Ph.D., is a retired research scientist from MPCA, where she worked to develop an invertebrate biological index for rating wetlands, helped start the WHEP volunteer monitoring program, and led the state's investigation into widespread deformities in frogs. Her book, "Peril in the Ponds: Deformed Frogs, Politics, and a Biologist's Quest," was published in 2012 by the University of Massachusetts Press. She lives in Roseville.