

April 4, 2014

Robert Bonnie
Under Secretary for Natural Resources
and Environment
U.S. Department of Agriculture
1400 Independence Ave., SW
Washington, DC 20250

Dear Under Secretary Bonnie:

As scientists with backgrounds in ecology and other natural resource-related disciplines, we are deeply concerned with the prospect of hardrock mining immediately upstream of the Boundary Waters Canoe Area Wilderness, and write to express our support for the Northeastern Minnesotans for Wilderness request for a Programmatic Environmental Impact Study addressing potential mining in the Boundary Waters watershed. The international Boundary Waters—Quetico area on the Minnesota/Ontario border is unique in the world in the extent and quality of its interconnecting waterways, and should be safeguarded from the major threats posed by large-scale hardrock mining.

The potential impacts on water quality from the mining of sulfide ores make the location of such mines upstream from a world-class resource like the Boundary Waters inherently problematic. Furthermore, the particular qualities of the area, including the low buffering capacity of water and soil and the interconnection of lakes and streams, make the Boundary Waters watershed particularly vulnerable to the impacts of mining.

It is our understanding that mining was not addressed in the Superior National Forest planning process because at the time, the current level of interest in mining was unforeseen. As a result, no attention has been given to the question of whether particular areas (or indeed, the entire National Forest) are inappropriate for this type of mining. In the absence of the “big picture” environmental review that accompanies the planning process, decisions are being made by the Forest Service and the Bureau of Land Management that encourage mining companies to expend resources and to develop mine plans for areas that the agencies may belatedly realize are too sensitive to mine.

These decisions could also affect the agencies’ ability to protect the Boundary Waters from mining impacts going forward. Such a decision is currently pending before the BLM, i.e., the renewal of two federal mineral leases held by Twin Metals Minnesota. Our understanding is that the U.S. Forest Service retains the authority to condition or deny these lease renewals under certain circumstances. The agencies should not proceed with these long-term lease renewals until the very real risks of mining this ore in this location are assessed and understood. The Programmatic EIS should include the alternative of withdrawing federal minerals from leasing as an option for appropriate protection of the Boundary Waters watershed.

The Programmatic EIS should be prepared in conjunction with consideration of a proposed Amendment to the Superior National Forest Management Plan prepared under the regulatory framework of the 2012 Forest Service planning rule. The emphasis in the 2012 Forest Service planning rules on the use of best available science, and the goal of ecosystem integrity, would be most appropriate in assessing the impacts of potential sulfide-ore mining on water quality and ecosystem health.

We suggest that the assessment of potential mining in the Bristol Bay watershed of Alaska, recently prepared by the U.S. Environmental Protection Agency (EPA), would be an appropriate model for considering the risks of mining in the Boundary Waters watershed. The assessment's approach of reviewing the assets and vulnerabilities of a valuable and high-functioning ecosystem and considering up-front a range of possible mining scenarios would help the Forest Service and BLM make informed decisions early in the minerals development process. The Bristol Bay Assessment can be found at <http://www2.epa.gov/bristolbay>

In our view, EPA's final *Bristol Bay Watershed Assessment* aptly identifies the outstanding ecological and cultural values at risk from mining in the Bristol Bay watershed, and appropriately considers a broad geographic area. A similar scope would be appropriate for the Boundary Waters watershed, as the potential mining district includes several large mineral deposits with the potential to impact hundreds of connected waters.

We understand that no specific mine plan in the Boundary Waters watershed has yet been submitted for agency approval. We also understand that at Bristol Bay, the EPA has been criticized for assessing potential impacts based on preliminary mine plans that are likely to change. We disagree strongly with these criticisms and believe that the use of credible mining scenarios (such as the one Twin Metals Minnesota currently provides to potential investors) is appropriate for this sort of forward-looking analysis. We note that the nature of metal mining, with its high potential for encountering unanticipated conditions, means that nearly any major mine plan will change, even after permitting.

In close, we write as concerned citizens to urge you to ensure that the full extent of the risks posed by hardrock mining upstream from the Boundary Waters are thoroughly considered through appropriate environmental review before any pending decisions are made.

Sincerely (Institutions provided for identification purposes only, signatories do not represent the position of any institutions, organizations, academies or agencies with which they may be affiliated),

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