NORTHMET MINING PROJECT AND LAND EXCHANGE

Final Environmental Impact Statement







Cumulative Effects

The Final Environmental Impact Statement (Final EIS) includes analysis of how the proposed NorthMet project would affect the environment when combined with the effects of other past, present, or reasonably foreseeable projects nearby. An analysis of "cumulative effects" is required by the National Environmental Policy Act (NEPA) and Minnesota Environmental Policy Act (MEPA).

How were past, present, or reasonably foreseeable projects identified?

Past and present projects were identified through a variety of historical sources, and information about these projects and their effects are a part of the baseline status of environmental resources presented in Chapter 4 of the Final EIS.

The Minnesota Department of Natural Resources, U.S. Army Corps of Engineers, and U.S. Forest Service identified reasonably foreseeable projects by searching local land use plans, current permit applications, and approved (but not yet built) projects near the area where the proposed NorthMet project would be constructed and operated.

What would be the cumulative effects?

There would be few cumulative effects from the proposed NorthMet Mine Project and Land Exchange after proposed mitigation and adaptive management measures are applied. The affected resources include the following:

- Water quantity and quality. There would be slight increases in flows within the Partridge and Embarrass River watersheds. The engineering controls would not result in significant changes to sulfate concentrations in the Partridge River, but would significantly decrease sulfate concentrations in the Embarrass River.
- Air quality. While there would be a decrease in air quality in the proposed NorthMet project boundary, other areas such as Voyageurs National Park, Grand Portage National Monument, and the Boundary Waters Canoe Area Wilderness, would not be affected.
- Wetlands. There would be a reduction in wetlands within the Partridge and Embarrass River watersheds, and there would be an increase to deep-water wetlands in the Partridge River watershed.
- No Endangered, Threatened or Special Concern (ETSC) animal would be cumulatively affected.
- Vegetation. There would be a loss of vegetative cover and associated ETSC plant species populations.

For more information about the cumulative effects of the NorthMet Mining Project and Land Exchange, see the Executive Summary and Chapter 6.0 (Cumulative Effects) of the Final EIS. Also, refer to additional Fact Sheets about the NorthMet Mining Project and Land Exchange Final EIS:

- 1. Project and Land Exchange Overview
- 2. What is the Environmental Review Process?
- 3. What's Changed since the Draft EIS?
- 4. What's Changed since the Supplemental Draft EIS?
- 5. Supplemental Draft EIS Comment Response Process
- 6. Effective Commenting on the Final EIS
- 7. A Guide to the Final EIS Document
- 8. Air Quality
- 9. Water Quantity
- 10. Wetlands
- 11. Water Quality
- 12. Wild Rice
- 13. Mercury
- 14. Threatened & Endangered Species
- **15. Cultural Resources**
- 16. Land Exchange
- 17. Reclamation & Financial Assurance
- 18. Cumulative Effects
- 19. Tailings Basin Stability
- 20. Water Modeling
- 21. Northward Flowpath
- 22. Duration of Treatment & Financial Assurance
- 23. Human Health