



# **WILDERNESS, RECREATION, AND TOURISM RESOURCE REPORT**

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## **TWIN METALS MINNESOTA PROJECT**

Environmental Review Support Document

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**Prepared for Twin Metals Minnesota, LLC**  
**Prepared by**

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**REVISION RECORD**

Revision	Date	Description	EDMS Download Date	Project Configuration Version
0A	11-20-2020	Submitted for Agency Review – TOC		

**REVISION NARRATIVE**

**DISCLAIMER**

*This document is a working document. This document may change over time because of new information, or further analysis or deliberation.*



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**LIST OF ABBREVIATIONS, ACRONYMS, AND SYMBOLS**

TMM Twin Metals Minnesota, LLC

## **1.0 INTRODUCTION**

The Twin Metals Minnesota, LLC (TMM) Project (Project) is focused on designing, permitting, constructing, and operating an underground copper, nickel, cobalt, platinum, palladium, gold, and silver mining project. Located approximately nine miles (14 kilometers [km]) southeast of Ely, Minnesota, and 11 miles (18 km) northeast of Babbitt, Minnesota, the Project targets valuable state, federal, and private minerals within the Maturi deposit, which is a part of the Duluth Complex geologic formation.

All potential Project infrastructure locations presented herein are considered preliminary and are undergoing further design and engineering evaluations which will dictate final design and locations. Further information about TMM and the Project is located at <http://www.twin-metals.com/>.

The purpose of this document is to provide necessary information for the environmental review and permitting process. TMM retained [insert Consultant name] (insert abbreviated Consultant name) to complete [insert text].

## **2.0 SUMMARY**

This report will describe the impacts of the proposed action and alternatives on the baseline conditions.

Describe how this report volume relates to the other volumes and how it is a compilation of baseline conditions impact assessment from other resources, including: air quality, water resources, visual resources, and noise and vibration.

Reference relevant sections of the FSDD, SEAW, and / or federal documents to remind the reader there is a defined scope that is being followed.

## **3.0 PROPOSED ACTION AND ALTERNATIVES**

### **3.1 Proposed Action**

- Reference the TMM Project Description and Alternatives document and indicate the proposed action is defined within this document.

### **3.2 Alternatives to the Proposed Action**

- Reference the TMM Project Description and Alternatives document and indicate the alternatives to the proposed action are defined within this document.

### **3.3 No Action Alternative**

- Reference the TMM Project Description and Alternatives document and indicate the no action alternative is defined within this document.

### **4.0 REGULATORY FRAMEWORK**

Establish regulatory framework that is applicable to wilderness resources. This includes state, federal, or tribal federal statutes or regulations and NEPA / MEPA requirements. This should also include regulatory definitions and how they are used by the Project.

- For wilderness this resource report should discuss:
  - Wilderness Areas are designated by Congress under the authority of The Wilderness Act of 1964.
  - Define wilderness characteristics:
    - Untrammeled;
    - Undeveloped;
    - Natural; and
    - Solitude or a Primitive and Unconfined Type of Recreation.
- For recreation and tourism this resource report should discuss:
  - Discussion of the Superior National Forest Land and Resource Management - Recreation Opportunity Spectrum.
  - Summary of the land use planning information presented in the *Land Use Resource Report*, as it pertains to recreation and tourism.
  - Minnesota Outdoor Recreation Act
  - Define recreation

### **5.0 AFFECTED ENVIRONMENT**

The affected environment will be deconstructed by features and / or activities of the proposed action and alternatives that would cause the potential effects to wilderness, recreation, and tourism.

#### **5.1 Area of Analysis**

The area of analysis for the baseline conditions would be defined by modeling and impact assessment of the other resources, including: air quality, water resources, visual resources, and noise and vibration. The area of analysis would be any wilderness, wilderness area or area with defined recreation and tourism where the proposed action or alternative could have effects due to the proposed action or alternative. Specific wilderness area should include:

- Federally Managed Areas
  - Wilderness Areas

- BWCAW
  - Established and Candidate Research Natural Areas
    - Keely Creek Natural Area
    - The Big Lake – Seven Beavers Area
    - Dragon Lake
  - Unique Biological Areas
    - Little Isabella River
    - Harris Lake National Natural Landmark
- State Managed Areas
  - Scenic Byway
    - Superior National Forest Scenic Byway
  - State Parks
    - Bear Head Lake State Park

## **5.2 Methods**

Recreation and tourism would be defined using:

- MDNR maps and resources
  - Recreation compass
- USFS recreation maps

As well as applicable data from the *Socioeconomics and Environmental Justice Data Package*.

In addition, the methods to define the baseline conditions would use the baseline conditions developed as part of the other resources outlined below and other resources as appropriate.

### **5.2.1 Air Quality**

Provide a high level overview of the methods used to establish the assess air quality conditions from the *Air Quality Data Package*.

### **5.2.2 Water Resources**

Provide a high level overview of the methods used to establish the baseline water resource conditions from the *Water Resources Data Package*.

### **5.2.3 Visual**

Provide a high level overview of the methods used to establish the baseline visual resource conditions from the *Visual Resources Data Package*.

### **5.2.4 Noise and Vibration**

Provide a high level overview of the methods used to establish the baseline noise and vibration conditions from the *Noise and Vibration Data Package*.

### **5.3 Existing Conditions**

Discuss the relationship between wilderness recreation and tourism. Establish current recreation and tourism patterns, including:

- Boating, canoeing, and camping in the BWCAW and other local, state, and federal lands;
  - South Kawishiwi River Campground
  - Birch Lake Campground
  - Backcountry capping site located on eastern shore of Birch Lake
- Hunting and fishing;
- Year-round recreation, including downhill skiing, snowmobiling, off-highway vehicle use, mountain biking, hiking, and golf;
  - Grant-in-aid snowmobile trail managed by Ely Igloos Snowmobile Club
- Recreational trails;
  - USFS T5-1901a and T5-1904 trails
- Water oriented commercial businesses (e.g., resorts; houseboat rental; fish guiding; other).

Then discuss the baseline condition of the wilderness areas that recreation and tourism occur including:

- Air Quality
- Water Resources
- Visual
- Noise and Vibration

## **6.0 IMPACT ASSESSMENT CRITERIA**

### **6.1 Area of Analysis**

Area of analysis for direct effects on wilderness, recreation and tourism baseline conditions would be defined by Project boundaries for the proposed action and alternatives to the proposed action with a specific focus on construction limits.

Additionally, the area of analysis for the indirect effects would be defined by modeling and impact assessment of the other resources, including: air quality, water resources, visual resources, and noise and vibration.

### **6.2 Methodology and Evaluation Criteria**



Describe rationale for how impacts will be assessed by the implementation of the proposed action or alternatives. The methodology should discuss how impact assessment were conducted on the various resources that could have potential effects on wilderness, recreation and tourism. The methods to define impacts developed as part of the other resources are outlined below and would include other resources as appropriate.

#### **6.2.1 Air Quality**

Provide a high level overview of the methods used to establish the impact assessment for air quality conditions from the *Air Quality Data Package*.

#### **6.2.2 Water Resources**

Provide a high level overview of the methods used to establish the impact assessment for water resources from the *Water Resources Data Package*.

#### **6.2.3 Visual**

Provide a high level overview of the methods used to establish the impact assessment for visual resources from the *Visual Resources Data Package*.

#### **6.2.4 Noise and Vibration**

Provide a high level overview of the methods used to establish the impact assessment for noise and vibration from the *Noise and Vibration Data Package*.

### **6.3 Indicators**

This section will discuss how indicators were selected and what the indicators are.

- Changes in resulting from changes in access, use, and recreational opportunities;
- changes in use of existing recreation areas;
- changes to ambient air quality;
- changes to water quality;
- changes to noise levels; and
- conflicts with existing federal, state, and local recreation management plans and policies.

### **6.4 Timeline for Analysis**

Timeline for analysis of the effects would be determined by the individual resources and would likely be all of the construction and operations phase and some of the closure phase.

## **7.0 ENVIRONMENTAL CONSEQUENCES**

Provide a high level summary of what is presented in the environmental effects. Section summarizes what environmental effects are and the effects of the proposed action and alternatives.

### **7.1 Discussion of Environmental Effects**

Using the affected environment and the impact assessment an assessment of impacts to wilderness resources will be conducted and described within this section.

The following items will be assessed and described for the proposed action, alternatives to the proposed action, and the no action alternative:

- Impact on existing federal, state, and local recreation management plans and policies;
- Impacts on access to existing recreation opportunities or areas by type;
- Impact on use of existing recreation areas; and
- Impact on tourism resulting from changes in access and use of recreation areas and opportunities.
  
- Discussion on impacts to wilderness areas:
  - air
  - water quality
  - visibility
  - noise and vibration
- The wilderness areas are likely to include the following wilderness areas within 15 miles of the Project:
  - Federally Managed Areas
    - Wilderness Areas
      - BWCAW
    - Established and Candidate Research Natural Areas
      - Keely Creek Natural Area
      - The Big Lake – Seven Beavers Area
      - Dragon Lake
    - Unique Biological Areas
      - Little Isabella River
      - Harris Lake National Natural Landmark
  - State Managed Areas
    - Scenic Byway
      - Superior National Forest Scenic Byway
    - State Parks
      - Bear Head Lake State Park

**7.1.1 Proposed Action**

Impacts associated with the proposed action will be described in this section.

**7.1.2 Alternatives to the Proposed Action**

Impacts associated with the alternatives to the proposed action will be described in this section.

This discussion will focus on differences in impacts between the alternatives and proposed action. Impacts that are the same between the proposed action and alternatives will be noted but not discussed in detail.

**7.1.3 No Action Alternative**

Impacts associated with the no action alternative will be described in this section.

**8.0 AVOIDANCE, MINIMIZATION, MITIGATION, AND MONITORING MEASURES**

Highlight environmental protection measures, best management practices, and mitigation plans that the proposed action and alternatives would reduce the potential for impacts from the Project. Information should be pulled from the TMM Project Description and Alternatives document.

**8.1 Proposed Action**

Avoidance, minimization, mitigation, and monitoring measures associated with the proposed action will be described in this section.

**8.2 Alternatives to the Proposed Action**

Avoidance, minimization, mitigation, and monitoring measures associated with the alternatives to the proposed action will be described in this section.

**9.0 REFERENCES**



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## **FIGURES**



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## **APPENDICES**



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**APPENDIX [#A, B, C, D]**

**[APPENDIX TITLE]**



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**APPENDIX [#A, B, C, D]**

**[APPENDIX TITLE]**

*[Insert page break for each additional appendix.]*