

Silica Sand Mining Moratorium Report Outline 3-21-12

- I.* Introduction
 - a. Background to Moratorium
 - b. What is Frac Sand?
 - c. Location of Frac Sand in Red Wing
 - d. What does a typical sand mine operation look like?
 - i. Overburden removal/excavation
 - ii. Excavation
 - iii. Blasting
 - iv. Crushing
 - v. Processing
 - vi. Transportation
 - vii. Reclamation

- II.* Potential Environmental Impacts
 - a. Air
 - b. Water Resources
 - c. Fisheries
 - d. Solid Waste Management
 - e. Recreation and Managed Lands
 - f. Endangered and Threatened Species and Habitats
 - g. Archeological and Historic Impacts
 - h. Socio-Economic
 - i. Transportation

- III.* Red Wing Comprehensive Plan Guidance
 - a. 2007 Comprehensive Plan References
 - b. Open Space Preservation Plan

- IV.* Existing Regulatory Framework

- V.* Alternative Regulatory Approaches
 - a. Prohibit Frac Sand Mining/Processing
 - b. Limit Frac Sand Mining/Processing to Agriculture and I-2 Zoning Districts
 - c. Limit Mining from Open Space Preservation Priority areas
 - d. Establish new Special Provisions Section of Zoning Code with the following elements
 1. Xxx
 2. Xxx

3. Xxx

e. Establish Licensing Provisions

VI. Recommendations