Bringing Mining Back to the Cuyuna Range?
A BLAEDC Update

BLAEDC EXECs:
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Kevin Egan
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The Brainerd Lakes Area Economic Development Corporation (BLAEDC) is a 501c3 non-profit organization.

Mission Statement:
Expanding Business, Building Community, and Growing Jobs in Crow Wing County

Contact us!
www.growbrainerdlakes.org
218-828-0096
Regional Mining Thrives
* The Backbone of Local Economy
* 1890-1950
Mining in the Past
More Recent Past

* Mining Plays Out/Disappears
  * 1960-1980
* Remnants of Past Operations
  * Pit Lakes
* Stockpiles/Recreation Areas
Creation of the Cuyuna Country State Recreation Area (CCSRA)

- Abandoned mining operations left behind mining pits 100 to 525-feet deep and rock stockpiles 200-feet high
- Through the efforts of the Iron Range Resources Rehabilitation Board (IRRRB), Crow Wing County, local governments, two joint powers boards, volunteer groups, and the Department of Natural Resources, the area become an outdoor recreation attraction
- Officially became a MN State Recreation Area in 1993
Current Land Use within the CCSRA

* Recreation and Tourism
* Hope for Future Expansion
* Goal of 100 Miles of Mountain Biking Trails
CMR’s Manganese/Iron Update
Rich Manganese/Iron Deposit in Emily MN
• Since 2010, CMR has been working toward becoming NI 43-101 compliant (a mining guideline) that many investors/mining companies require to get to a commercial operation;
• Borehole waterjet extraction technique was tested in 2011... some of that process worked and CMR is looking to possibly use something similar with modifications down the road;
• Recently signed a Memorandum of Understanding with two Canadian firms to enter into a Joint Venture agreement with the intentions of creating a pilot plant with the ultimate goal of producing a green manganese-based battery for the storage industry.
Joint Venture Partners Star and OTI

* Star Minerals Group, Ltd.
  * Saskatoon, Saskatchewan
  * Junior Mining Company focused on finding, exploring and developing strategic metal deposits for the battery industry and green energy sector
  * Trades in the Canadian Stock Exchange under the symbol “SUV”

* Octopus Technologies, Inc.
  * Vancouver, British Columbia
  * Energy storage company which has developed and patented a smaller, lighter, green battery that significantly reduces the cost of energy storage and improves the capacity and longevity of the battery.
Prototype OTI Battery Compared to Normal Battery

Heavy lead acid battery

New planned manganese-based green battery
For more information

* www.cooperativemineralresources.com

* Or contact Char Kinzer, kinzer@cwpower.com, 1-800-648-9401
Future Land Use

- Mining Companies Expressing Renewed Interest in Cuyuna Range
- Purpose: To Recover “Leftovers” from Years Ago
  - Tailings
  - Stockpiles
  - Underground
- Occurring Now in Mesabi Range

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BLAEDC, CREDI, and “MED” Task Force Purpose

* Reviewing Current Options and Opportunities

* Need to Understand Future and Balance Interests
Research

* Retention of Consultant
* Visits with State DNR
* Conferences and Meetings
  * Nashwauk
  * SME
  * Eveleth
  * Hibbing
  * Crosby
* State Role is Critical
## MN Iron Ore Reserves

**Gross Pellet Tons (millions)**

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<tr>
<th></th>
<th>Capacity</th>
<th>Reserves</th>
<th>Mine Life*</th>
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<tbody>
<tr>
<td>Hibtac</td>
<td>8.0</td>
<td>113</td>
<td>14 years</td>
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<tr>
<td>Minorca</td>
<td>2.8</td>
<td>45</td>
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<tr>
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<tr>
<td>United Tac</td>
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<td>140</td>
<td>26 years</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>42.2</strong></td>
<td><strong>1,278</strong></td>
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*Mines Have Life Spans*
Ownership dictates revenue flow
  * Private Parties
  * State-Owned
  * Tax Forfeited Land

Tax-Forfeited Property Not in Recreational Areas
  * 20% to DNR
  * 80% to local taxing districts
    * 4/9 school district
    * 3/9 county
    * 2/9 city or township
What are the next steps?

* Interest of Mining Companies Continues; Pace Uncertain

* Process of “Social License” and Permitting is Slow and Political
Social License

* Three Strategies to “Win” Permission
  * Leadership
  * Stewardship
  * Citizenship

* A lot of stakeholders including: Cuyuna Lakes Region, Mountain Biking Community, etc.
Short Term Goals

* Continue to Advance Discussion with All Stakeholders

* A Multi-Year Work in Progress, Subject to Rapid Change

* Focus on Understanding Multiple Opportunities for Cuyuna Range
  * Modern Mining
  * Recreation
  * Historical Perspective