



Minnesota Association of County Planning & Zoning Administrators

October 7, 2009

Commissioner Sandy Layman



- **Iron Range Resources**
- **Leadership & Support Infrastructure**
- **Taconite Mining**
- **New Value-Added Iron Projects**
- **Nonferrous Opportunities**
- **Future**

IRONS IN THE FIRE



MINING IS OUR HISTORY **100 Years & Counting**

1866 – 1st Report of Iron Ore

1892 – 1st Shipment of Iron Ore

1922 – 1st Taconite Mining Operation

1953 – Largest Annual Iron Ore Shipment

2003 – Mesabi Nugget Pilot Plant

2008 – 40,599,311 Gross Tons



IRONS IN THE FIRE

Taconite



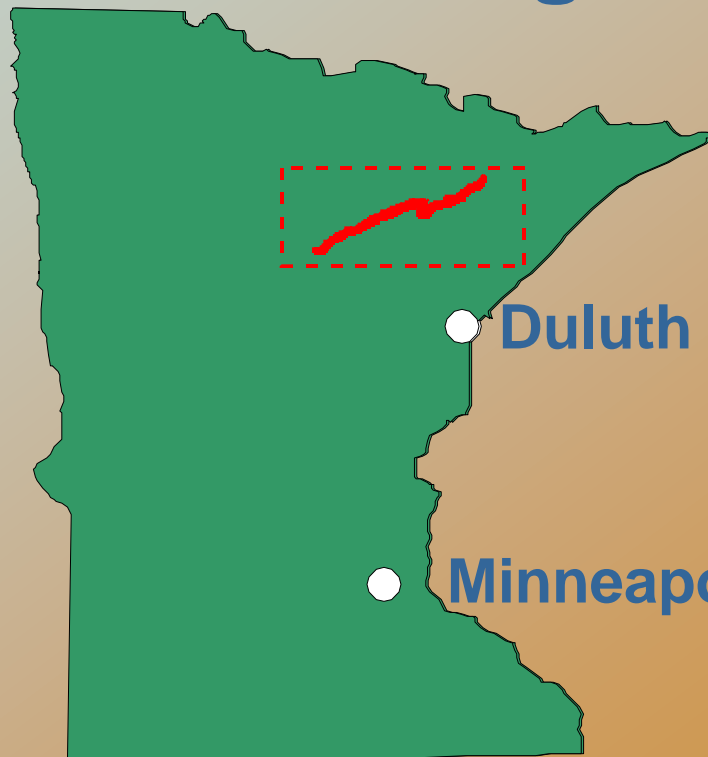
IRONS IN THE FIRE

Taconite



Minnesota is home to six taconite operations

Mesabi Iron Range



IRONS IN THE FIRE

Minnesota's Six Taconite Operations



Northshore

Minn

Hibtac

U -

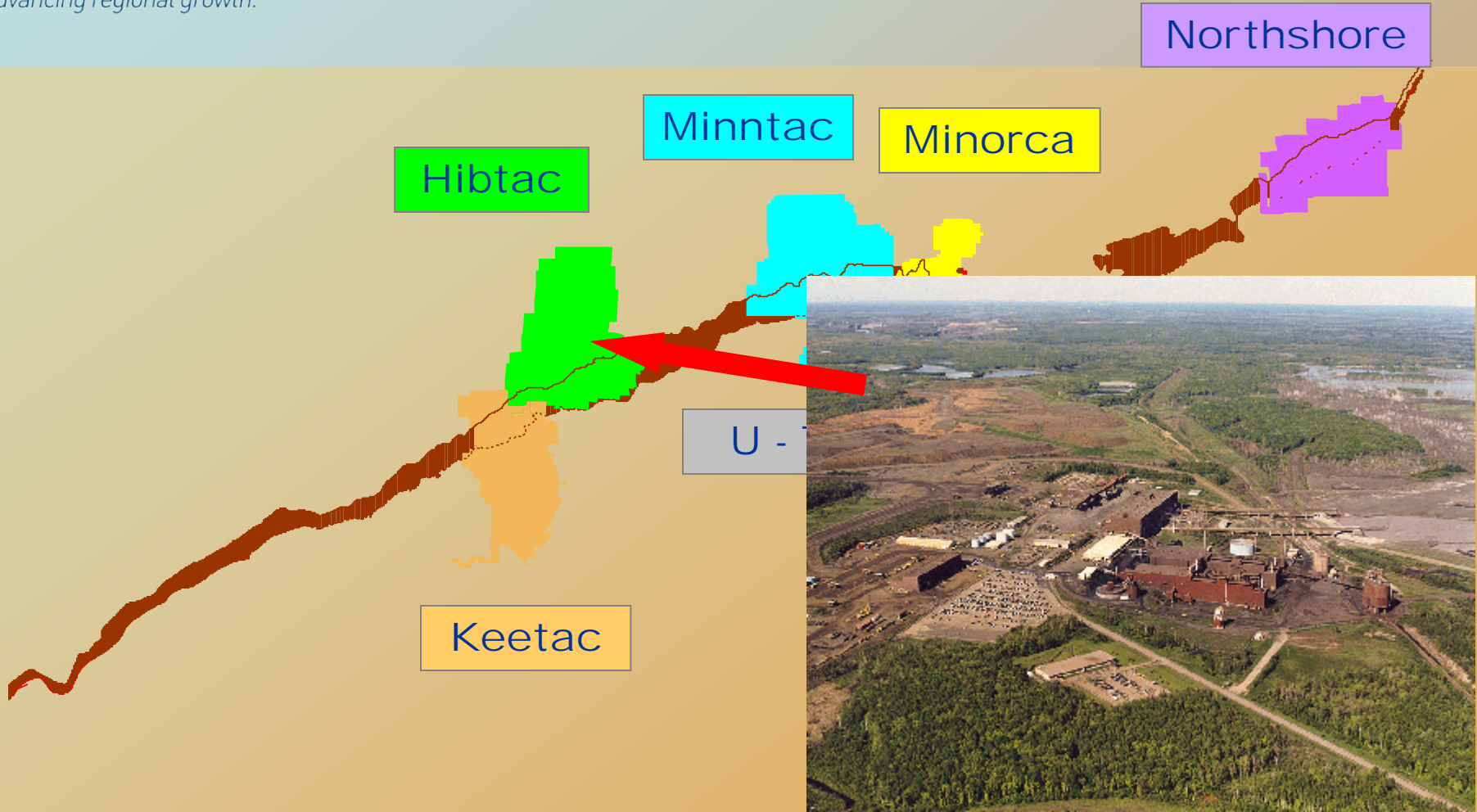
Keetac



U.S. Steel - Keetac opened 1967

IRONS IN THE FIRE

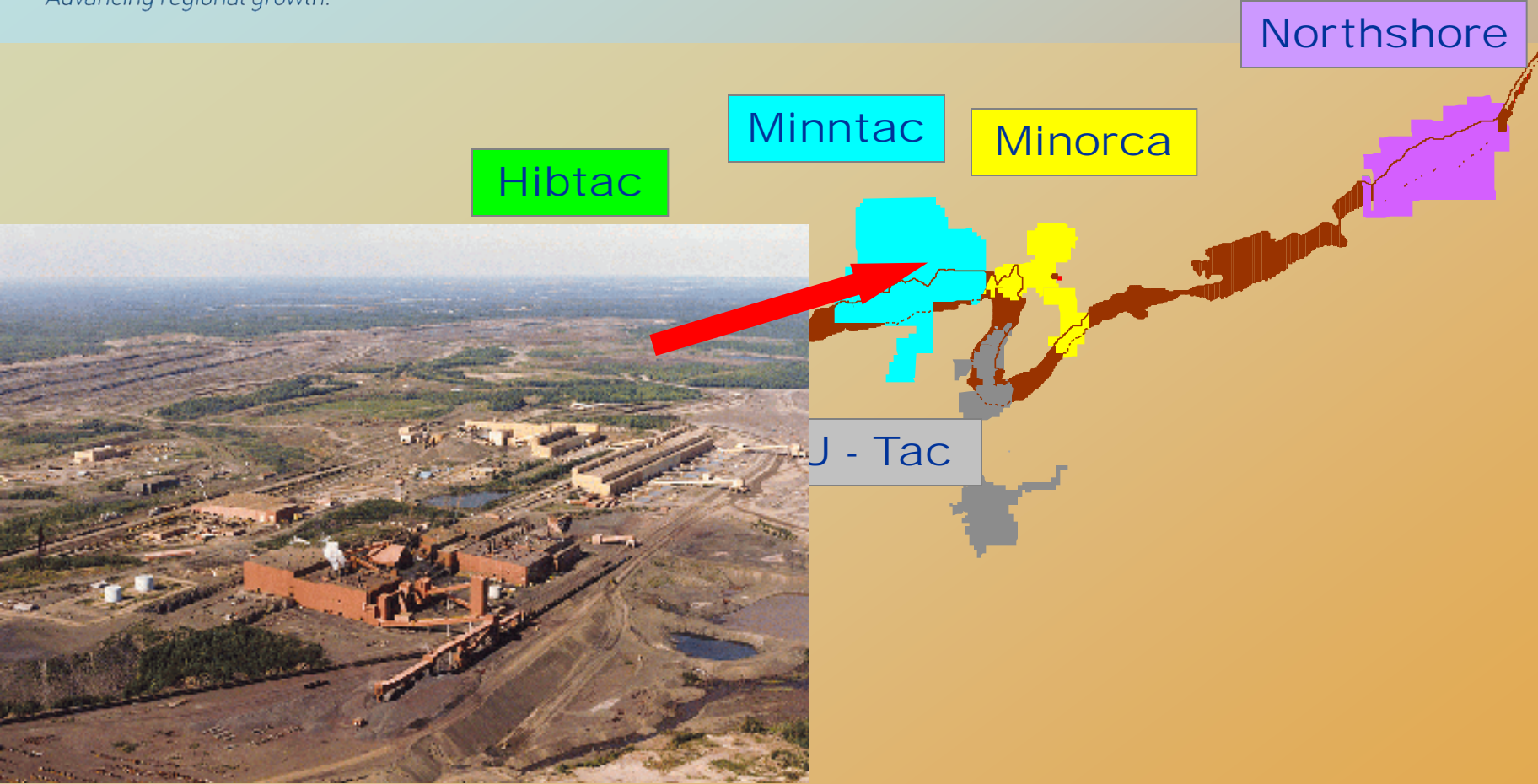
Minnesota's Six Taconite Operations



Hibbing Taconite opened 1976

IRONS IN THE FIRE

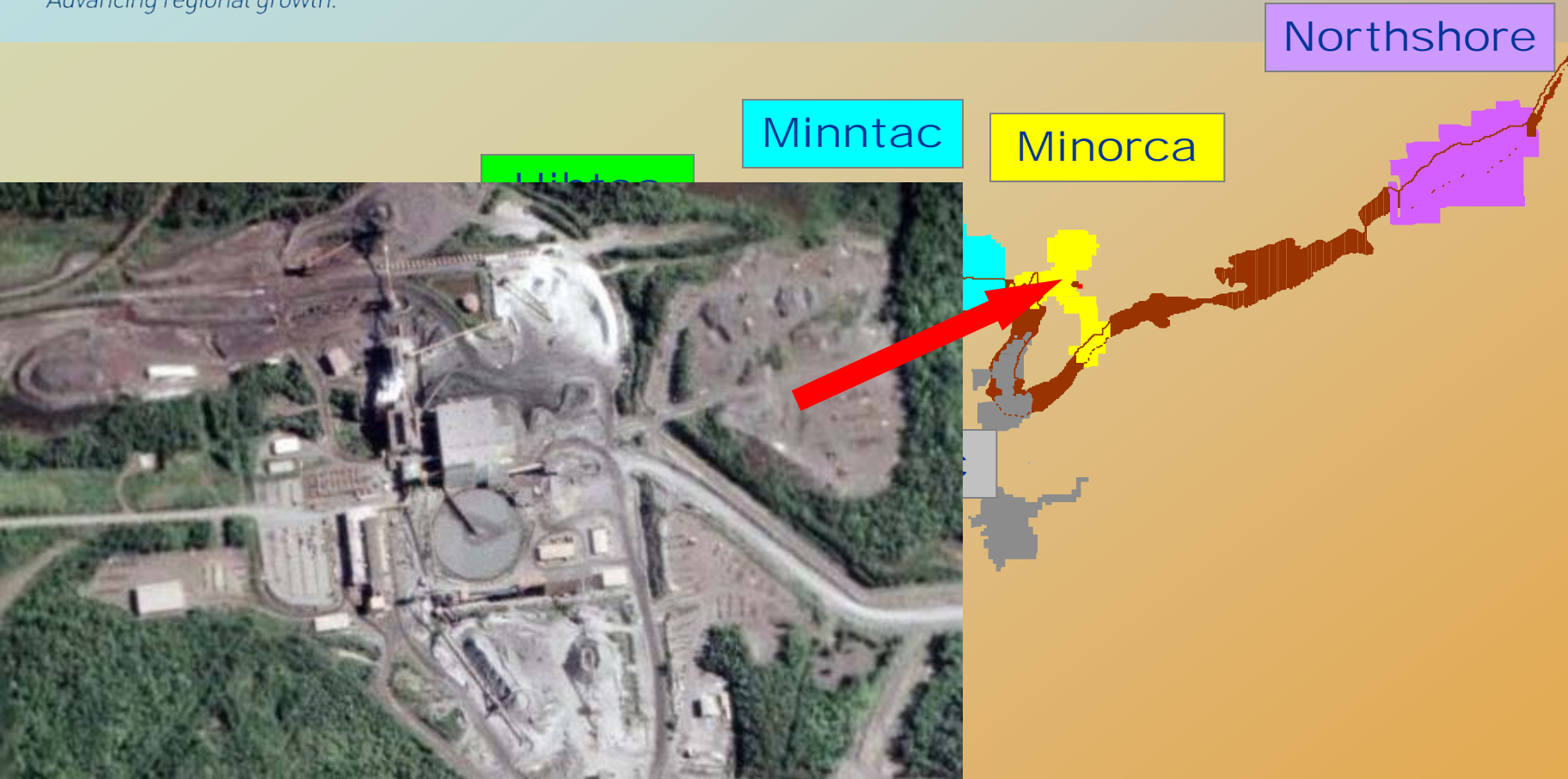
Minnesota's Six Taconite Operations



U.S. Steel - Minntac opened 1951

IRONS IN THE FIRE

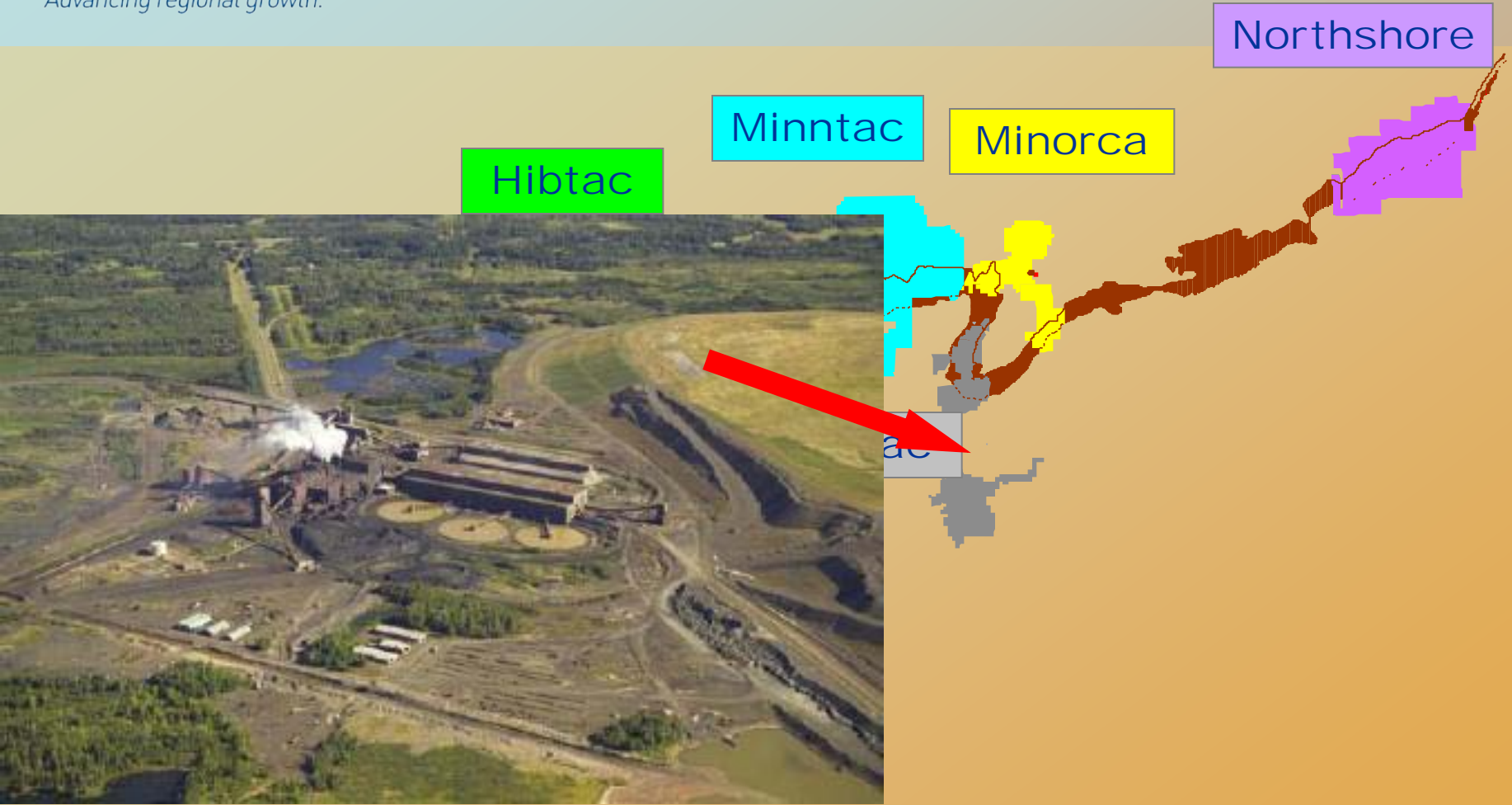
Minnesota's Six Taconite Operations



ArcelorMittal Minorca opened 1977

IRONS IN THE FIRE

Minnesota's Six Taconite Operations



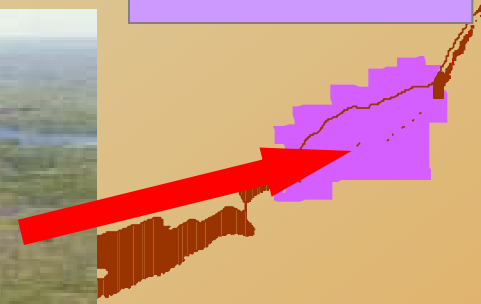
United Taconite opened 1965

IRONS IN THE FIRE

Minnesota's Six Taconite Operations



Northshore



Northshore Mining opened 1951

IRONS IN THE FIRE Workforce



3605 Employees





Economic Impact of Iron Mining on Minnesota's Economy

- » Wages & Benefits
- » Purchases
- » Royalties
- » Taxes

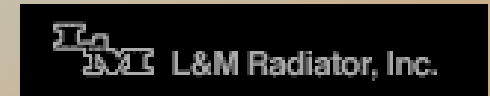
\$1.5 billion

IRONS IN THE FIRE Infrastructure

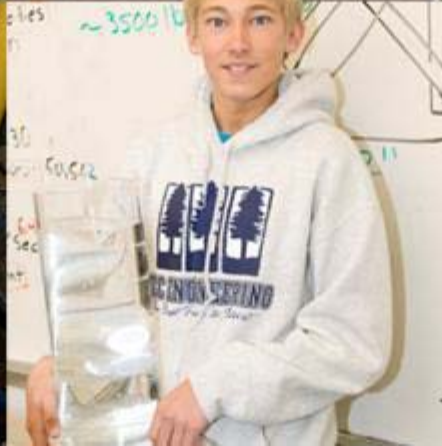


IRONS IN THE FIRE

Experienced Suppliers & Vendors



IRONS IN THE FIRE Trained Workforce





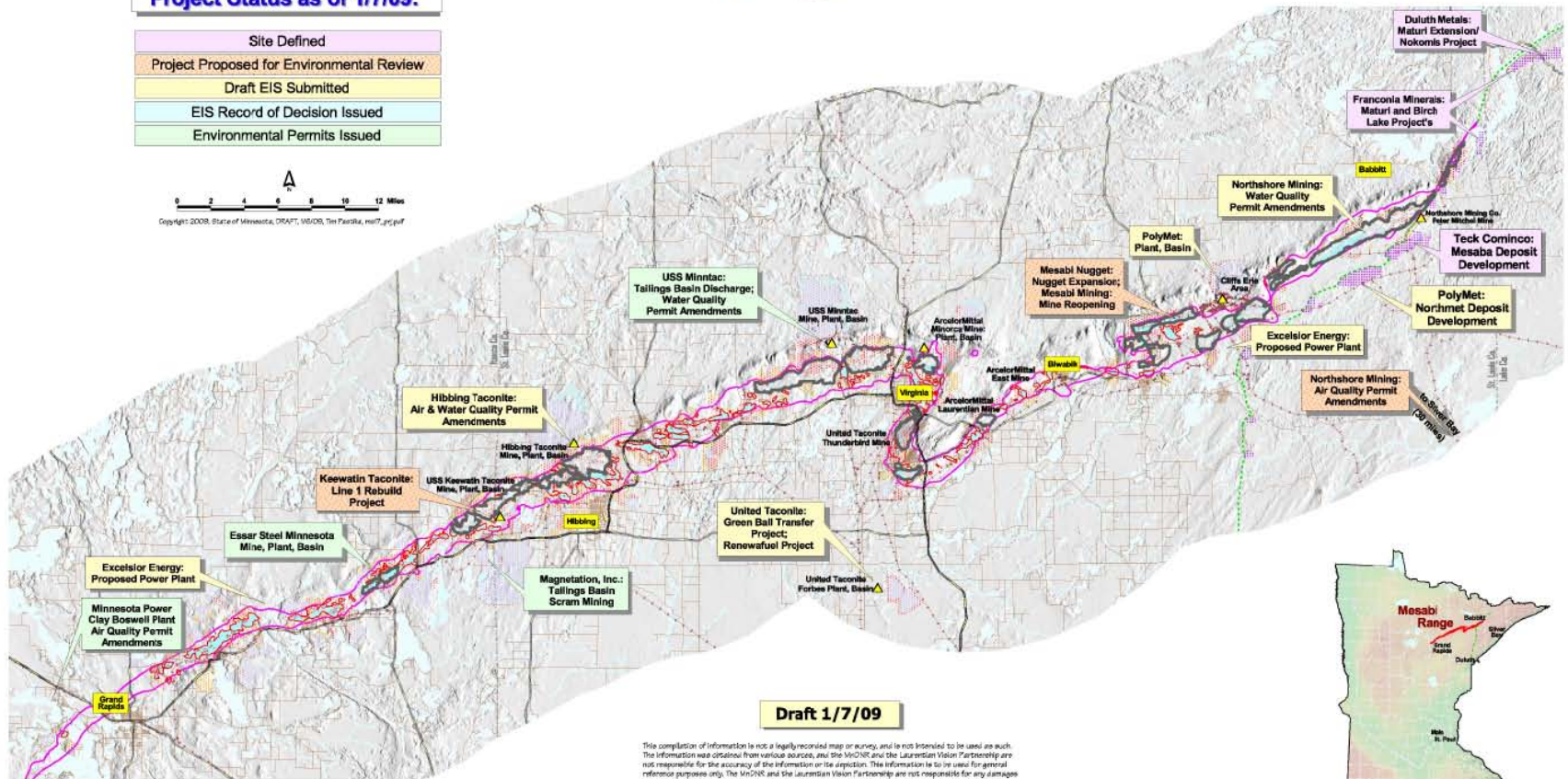
Large Scale Projects of the Mesabi Range Area:

Project Status as of 1/7/09:

Site Defined
Project Proposed for Environmental Review
Draft EIS Submitted
EIS Record of Decision Issued
Environmental Permits Issued



Laurentian Vision Partnership
Transforming pits and piles into lakes and landscapes



Draft 1/7/09

This compilation of information is not a legally recorded map or survey, and is not intended to be used as such. The information was obtained from various sources, and the MNR and the Laurentian Vision Partnership are not responsible for the accuracy of the information or the depiction. This information is to be used for general reference purposes only. The MNR and the Laurentian Vision Partnership are not responsible for any damages resulting from the use of the information herein contained. Contact Jim.Pummer@state.mn.us for further information about this Laurentian Vision Partnership product.





Large Scale Developments 2005 - 2011

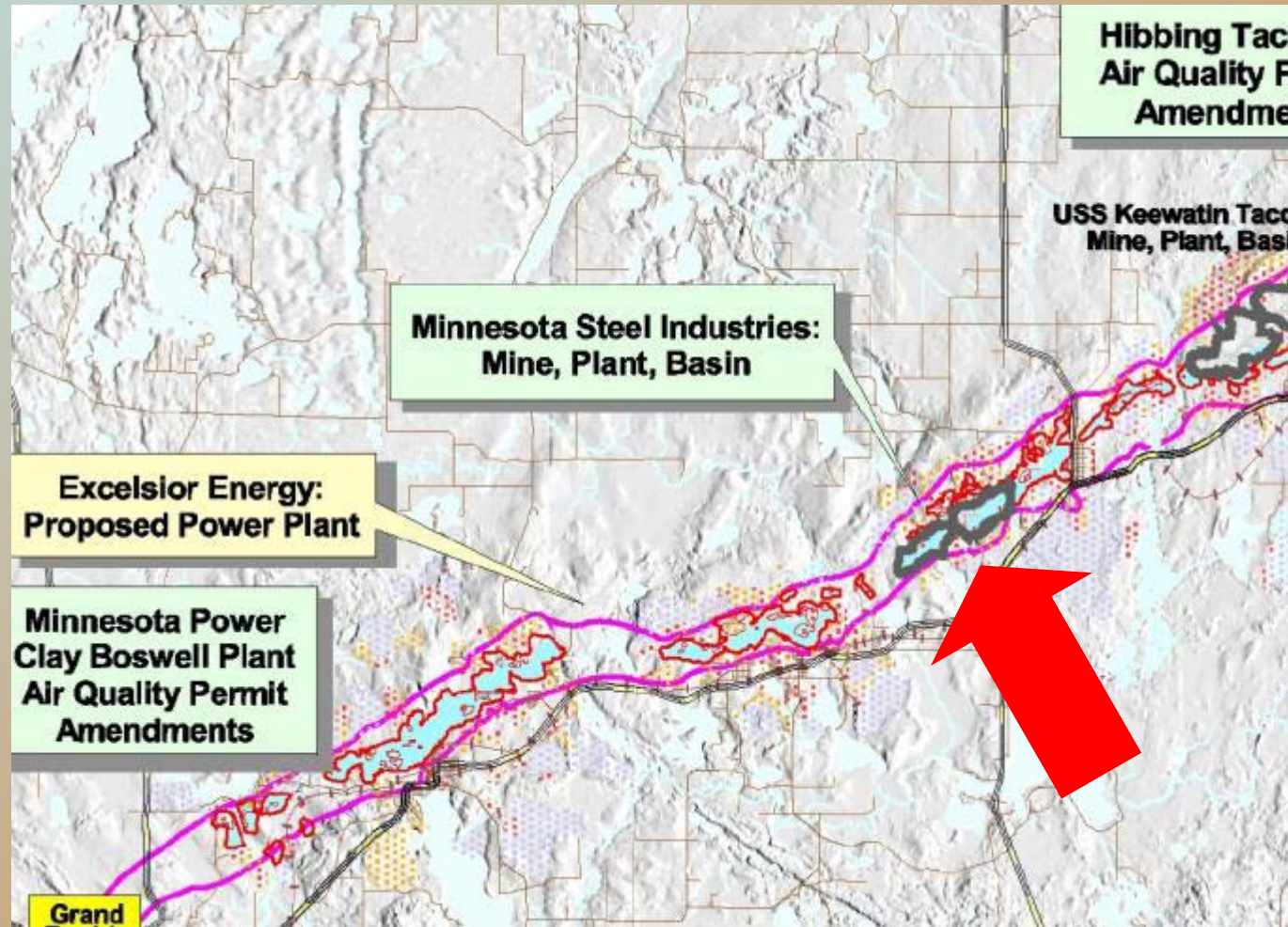
Excelsior Energy - Mesaba Energy Project	\$2,000,000,000
Essar Steel Minnesota, LLC Nashwauk	\$1,650,000,000
Duluth Metals, Ely	\$800,000,000
Franconia Minerals – Birch Lake & Maturi Extension	\$616,000,000
PolyMet’s NorthMet Project, Aurora & Hoyt Lakes	\$601,900,000
Keewatin Taconite Plant Expansion	\$300,000,000
Mesabi Nugget & Mesabi Mine Hoyt Lakes	\$400,000,000
MP Allete Clay Boswell Unit 3 Retrofit	\$200,000,000
Laurentian Energy Project for Hibbing and Virginia	\$80,000,000
Magnetation Inc., Keewatin	<u>\$7,300,000</u>

Total

\$6,647,900,000

IRONS IN THE FIRE

The Iron Range's 1st Steel Plant



IRONS IN THE FIRE

The Iron Range's 1st Steel Plant



Location: Nashwauk

Status: Financial Close Pending

Start date: 2011

Investment: \$1.65 billion

**State of Minnesota Investment:
\$71.9 million**

Permanent jobs: 700

Construction jobs: 2000

IRONS IN THE FIRE

The Iron Range's 1st Steel Plant

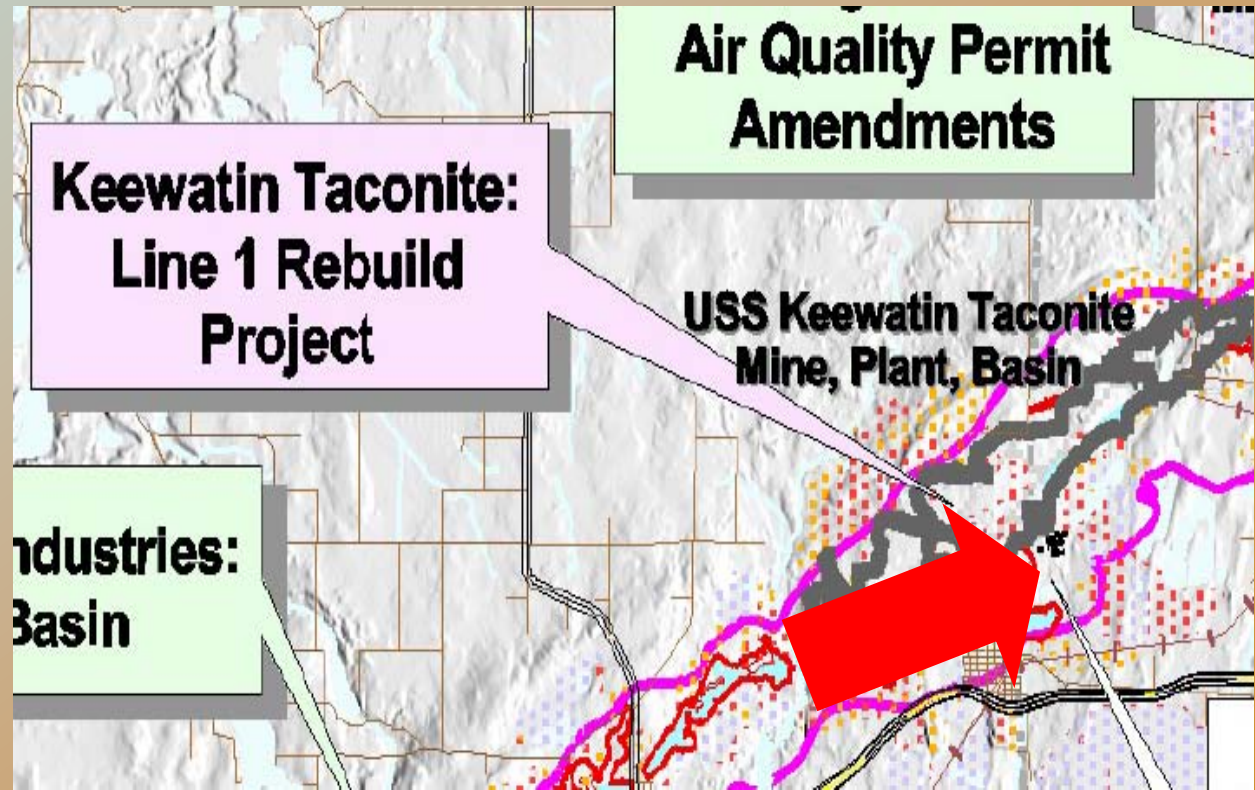


IRONS IN THE FIRE

Keewatin Taconite Line 1 Rebuild



**Keewatin
Taconite**



IRONS IN THE FIRE

Keewatin Taconite Line 1 Rebuild



Location: Keewatin

Status: Permitting Process

Start date: Fall 2010

Investment: \$300,000,000

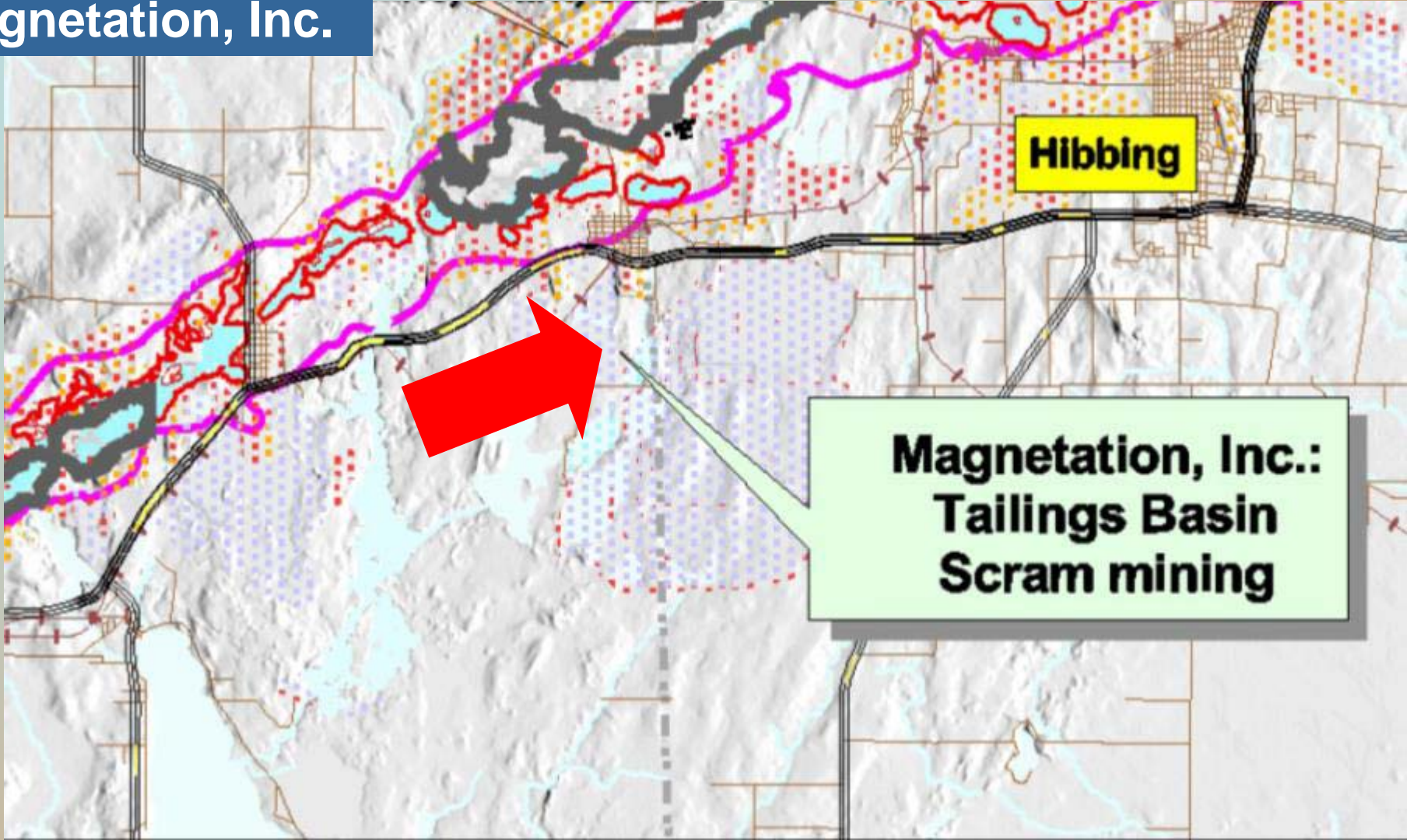
Permanent jobs: 75

Construction jobs: 500

IRONS IN THE FIRE Magnetation



Magnetation, Inc.



**Magnetation, Inc.:
Tailings Basin
Scram mining**

IRONS IN THE FIRE Magnetation, Inc.



Location: Keewatin

**Status: Construction complete
Production begun**

Start date: 2009

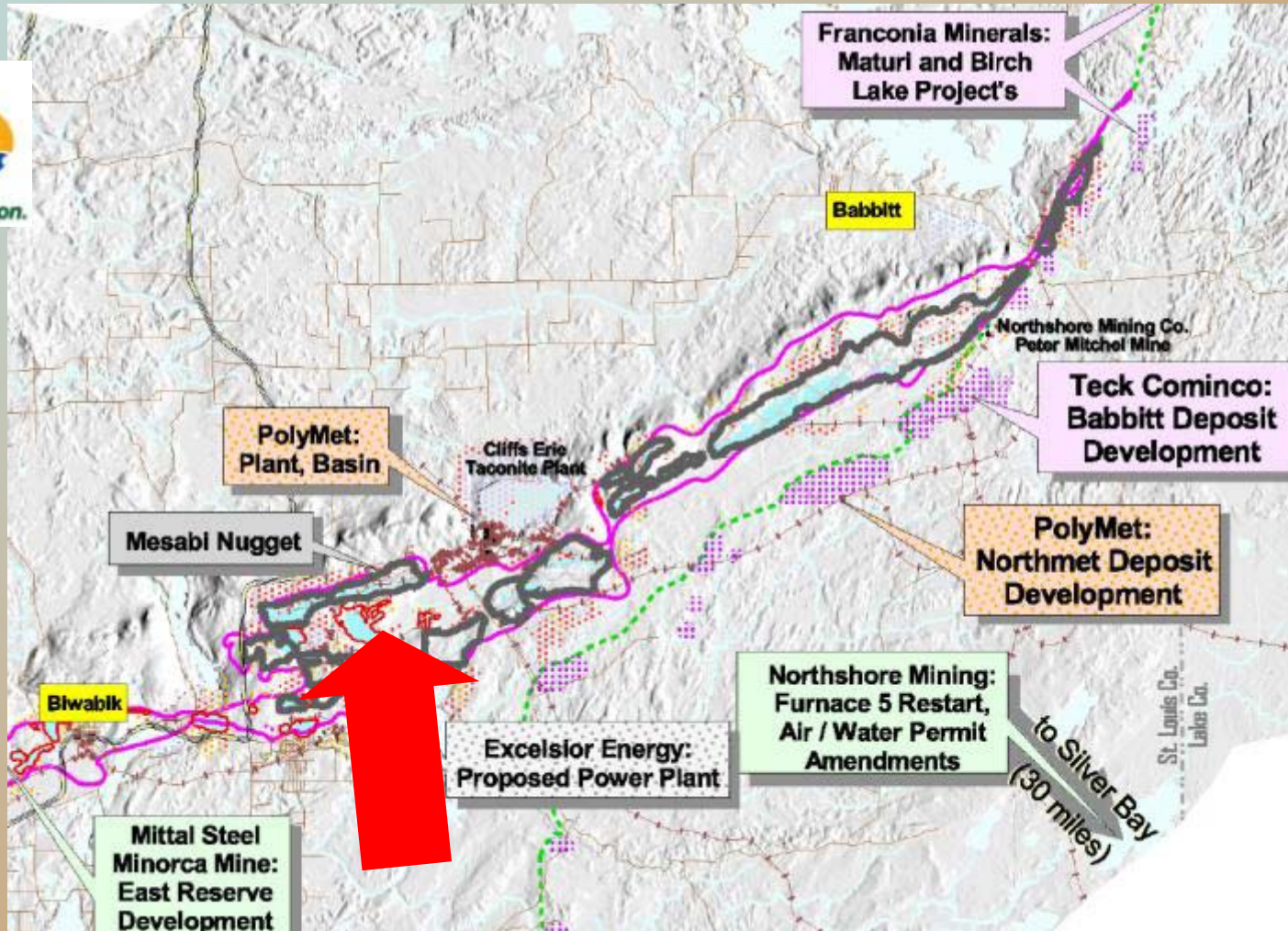
Investment: \$5,500,000

Permanent jobs: 45

Construction jobs: 15

IRONS IN THE FIRE

The World's 1st Commercial Iron Nugget Plant



IRONS IN THE FIRE

The World's 1st Commercial Iron Nugget Plant



Location: Aurora/Hoyt Lakes

Status: Under construction

Start date: 2009

Investment: \$270 million

State of Minnesota Investment:
\$42.5 million

(\$24.5 million Iron Range Resources & \$18 million DEED)

Permanent jobs: 65

Construction jobs: 500



IRONS IN THE FIRE

The World's 1st Commercial Iron Nugget Plant

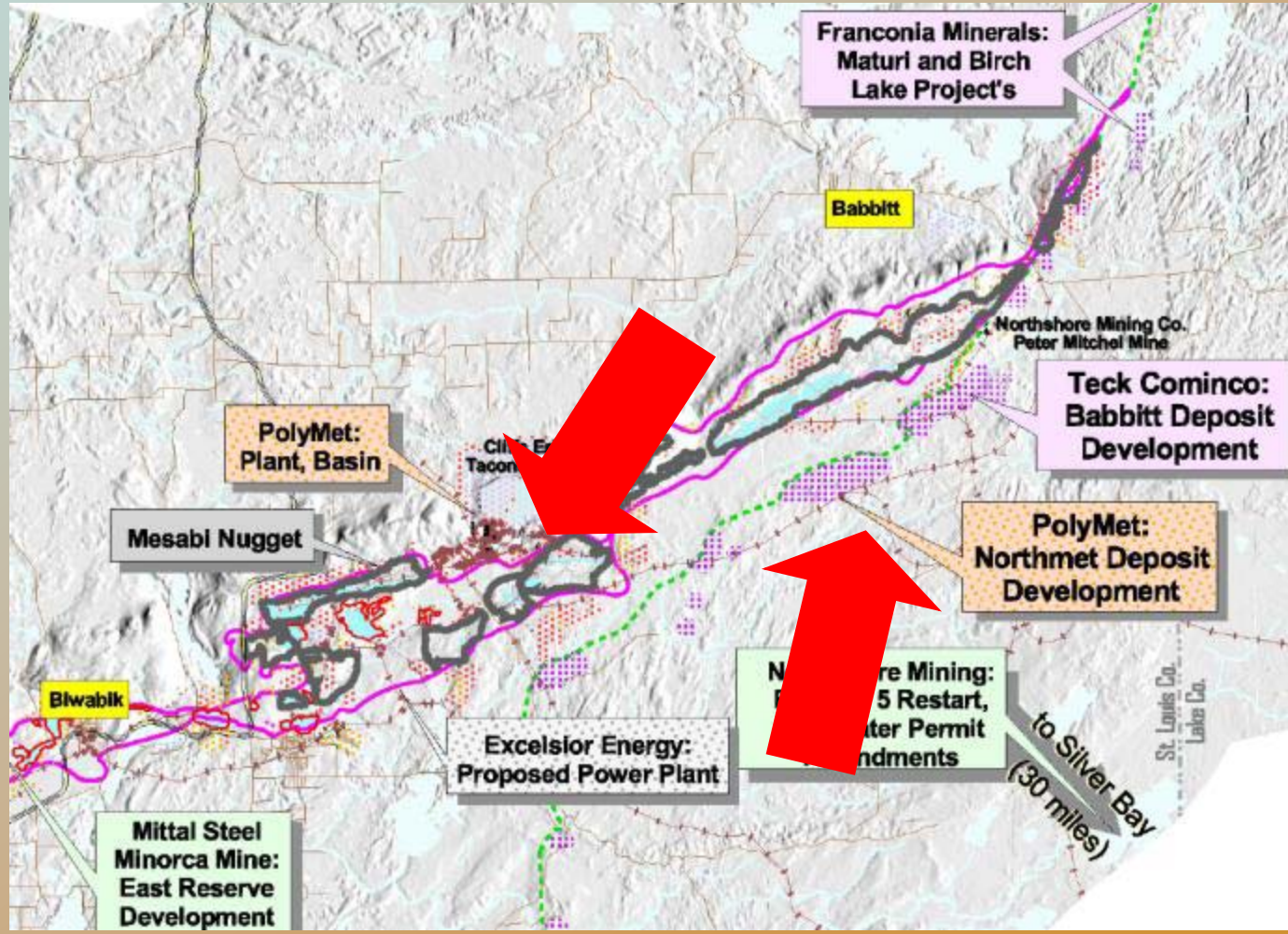


IRONS IN THE FIRE Mesabi Nugget - Pit



IRONS IN THE FIRE

PolyMet



IRONS IN THE FIRE Workforce



Location: Hoyt Lakes

**Status: Project proposed for
environmental review**

Investment: \$602 million

**State of Minnesota Investment:
Facilitated tailing basin acquisition**

Permanent jobs: 400

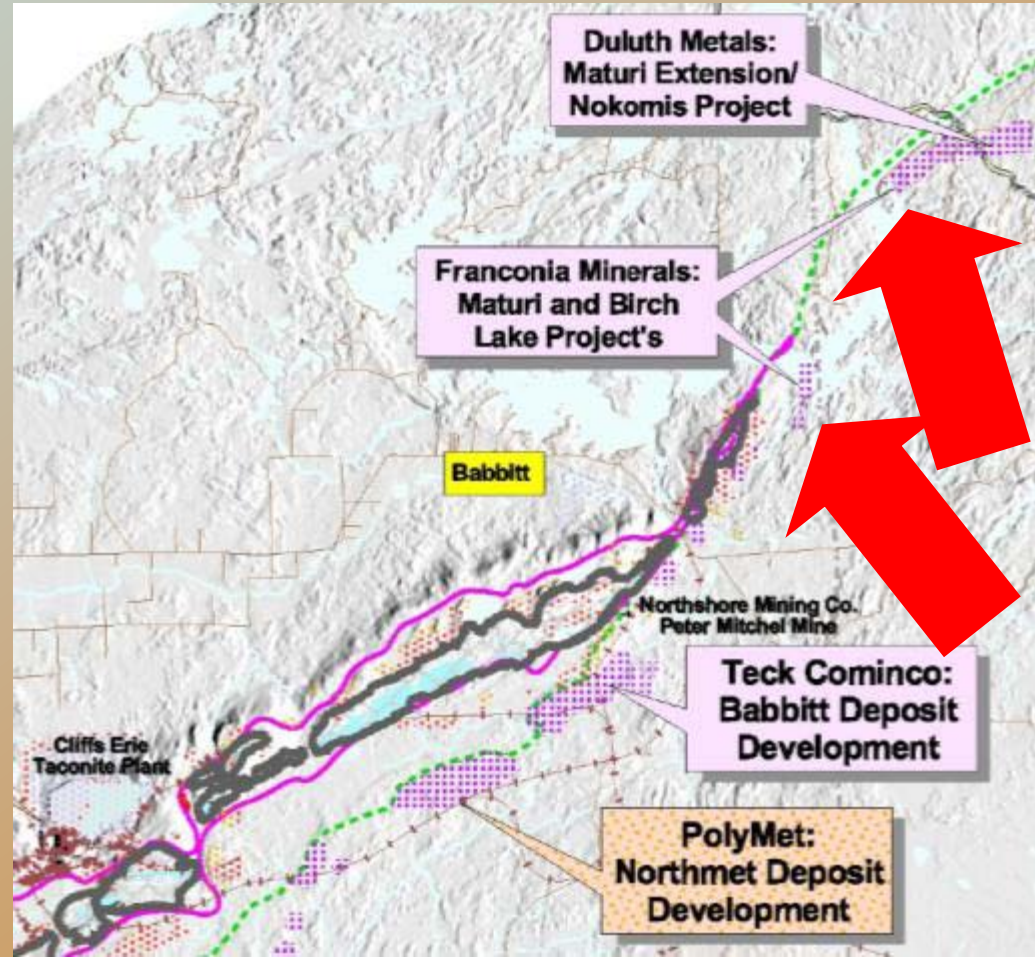
Construction jobs: 250



IRONS IN THE FIRE Franconia Minerals



Franconiaminerals
CORPORATION



IRONS IN THE FIRE

Workforce



Location: Babbitt

Status: Sites Defined

Investment: \$616 million

**State of Minnesota Investment:
\$2.5 million**
(\$1.25 million Iron Range Resources & \$1.25 million DEED)

Permanent jobs: 550

Construction jobs: 800



Governor's Committee on Minnesota's Mining Future

2004

- All Types of Mining
- Ferrous Industry
- Non-ferrous Industry
- Industrial Minerals Industry



IRONS IN THE FIRE

China



IRONS IN THE FIRE India



IRONS IN THE FIRE

Global Partners



ArcelorMittal



IRONS IN THE FIRE

Non-Ferrous Global Partners



Encampment Resources LLC



CONCLUSION:

As a result of these and other economic development initiatives, northeastern Minnesota is poised for an economic recovery that will revitalize the region and boost the entire state.

For more Information:



RangeReadiness.com



LVP.com



IronRangeResources.org



IRON RANGE
Resources
Advancing regional growth.

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