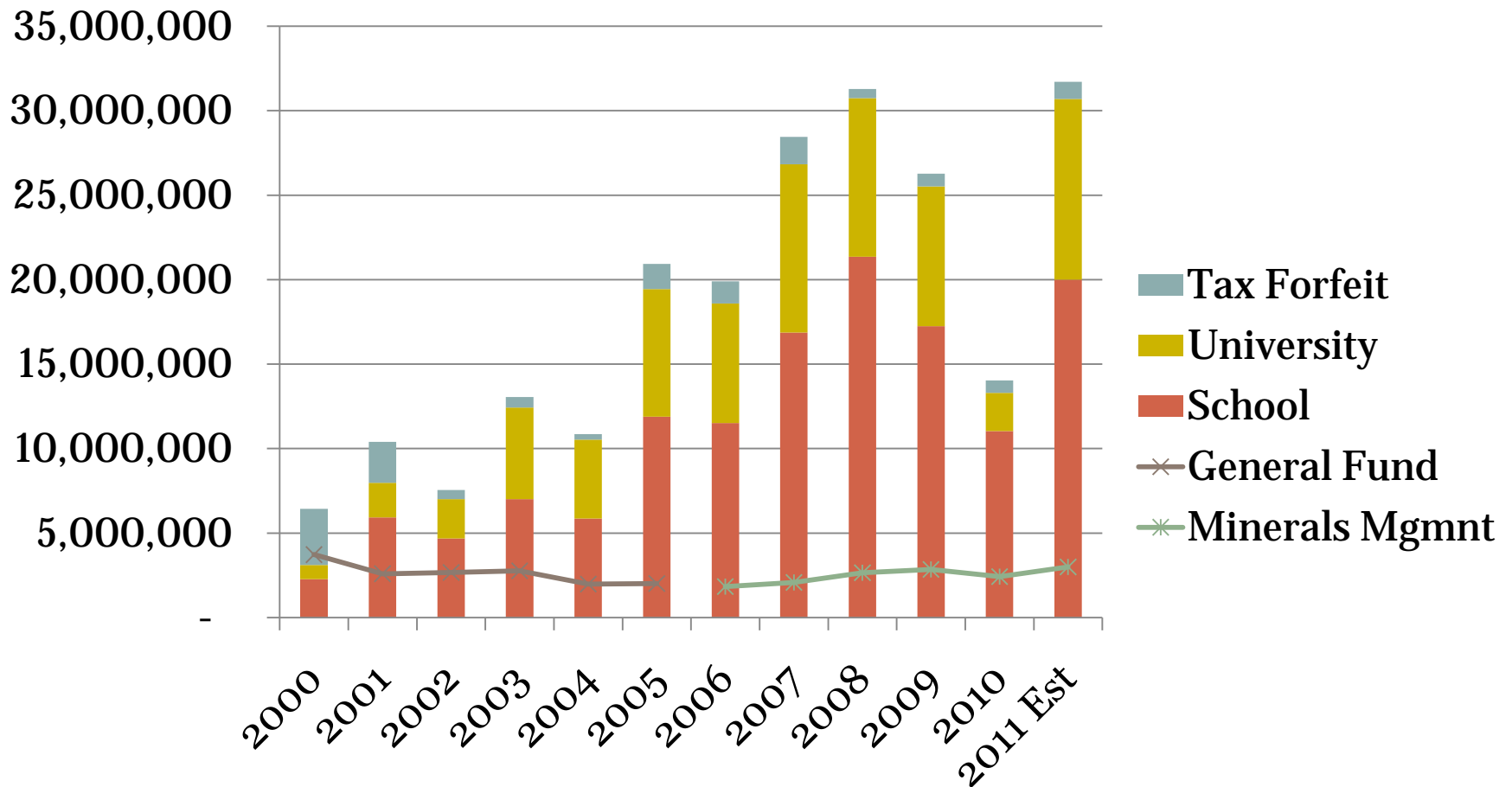


# Minerals Management

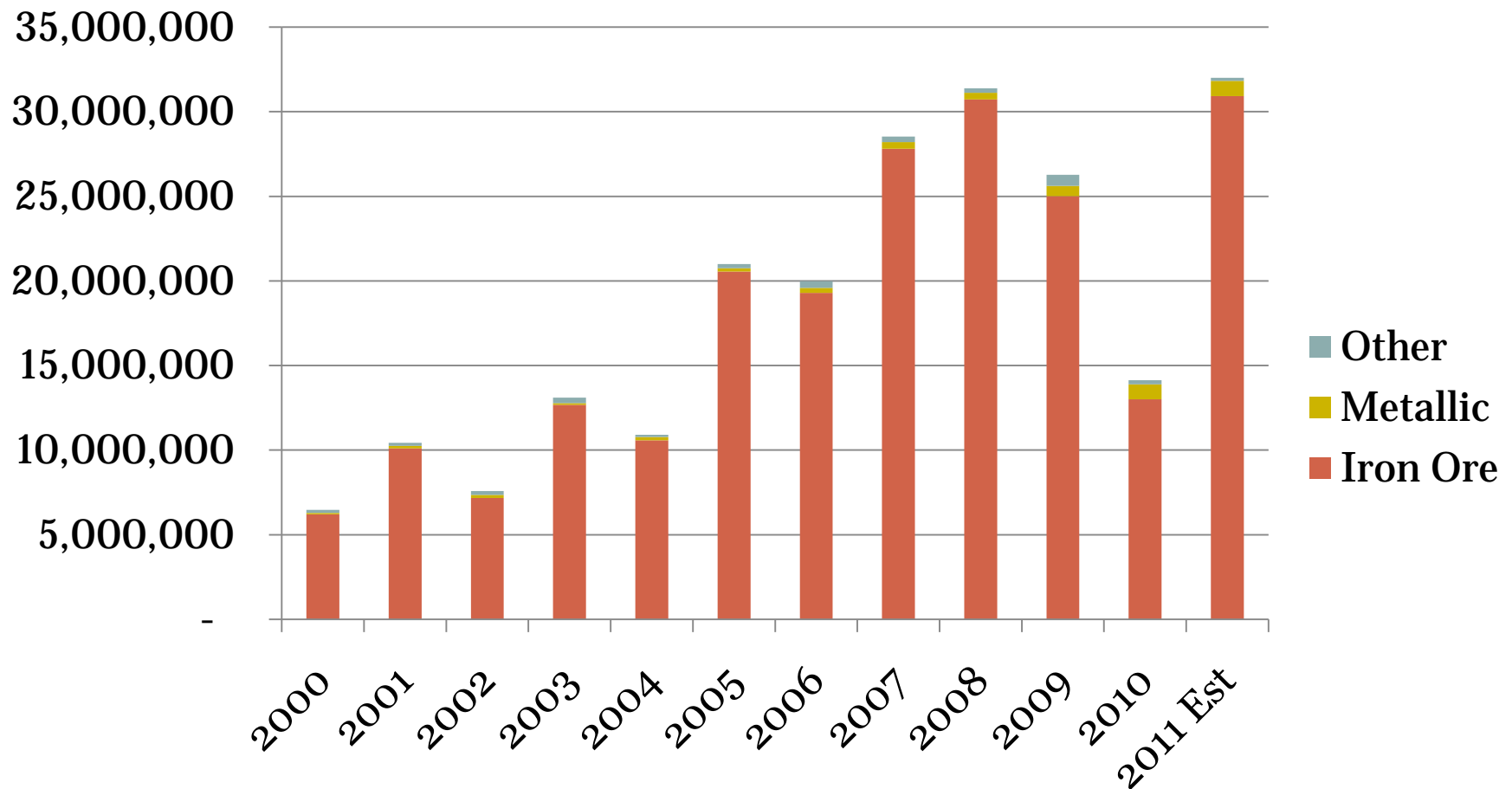


**MARTY K. VADIS, DIRECTOR  
LANDS AND MINERALS, MN DNR  
*NOVEMBER 15, 2010***

# State Mineral Receipts by Fund



# State Mineral Receipts by Commodity



# Iron Ore/Taconite



# Iron Ore/Taconite



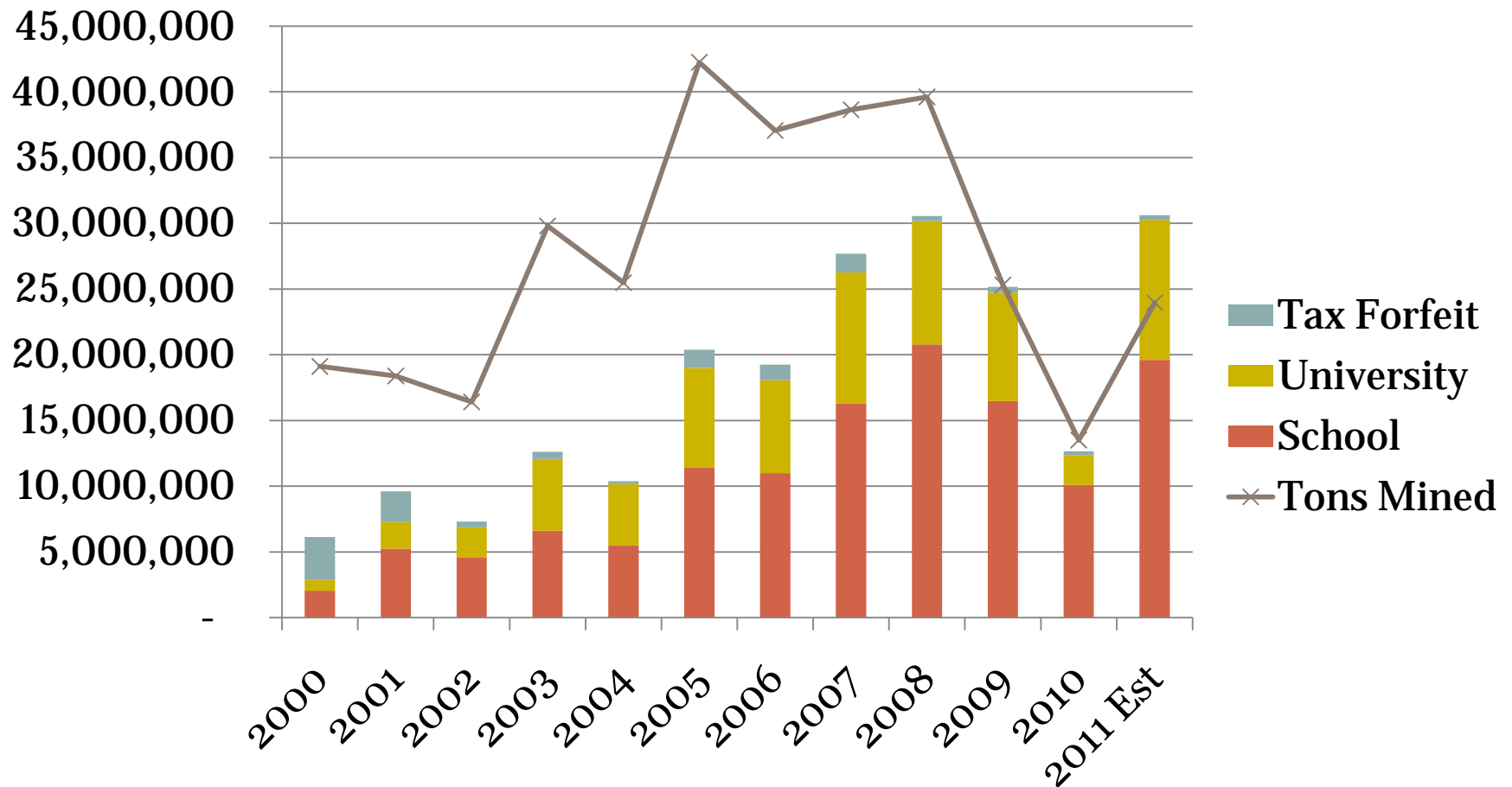
- ❑ Iron Ore/Taconite revenues for FY2010 to the school trust were down from recent years due to the global economic downturn
- ❑ However, iron ore prices appear to be rebounding with increasing demand for iron ore and steel production (most notably from China)
- ❑ The FY2011 and FY2012 gross revenues from iron ore on school trust lands are currently forecasted to be approximately \$19 million and \$27 million respectively

# Factors Effecting State Iron Ore Royalty Income

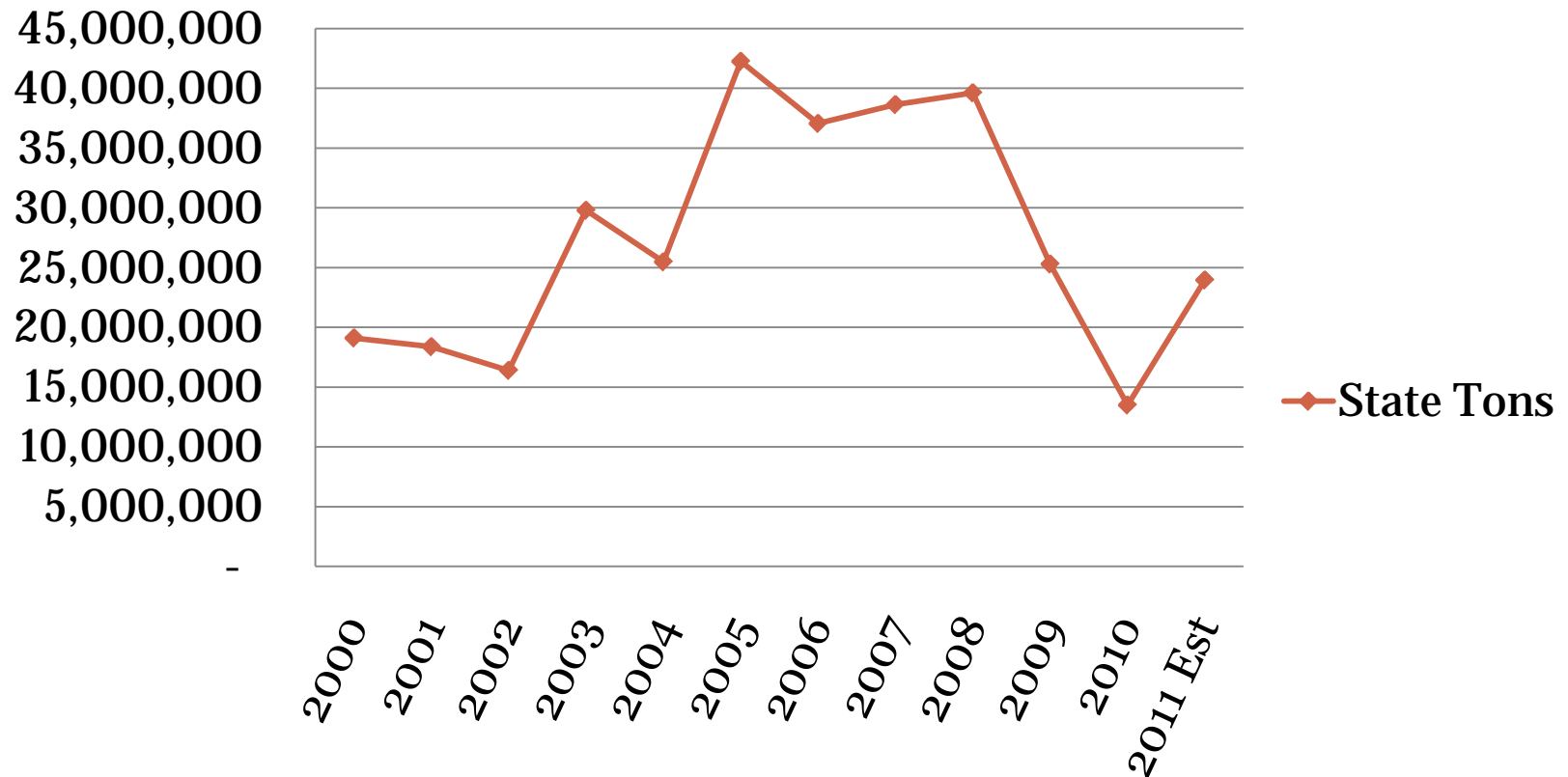


- Tons mined?
- Royalty rate?

# State Iron Ore Receipts and Tons Mined

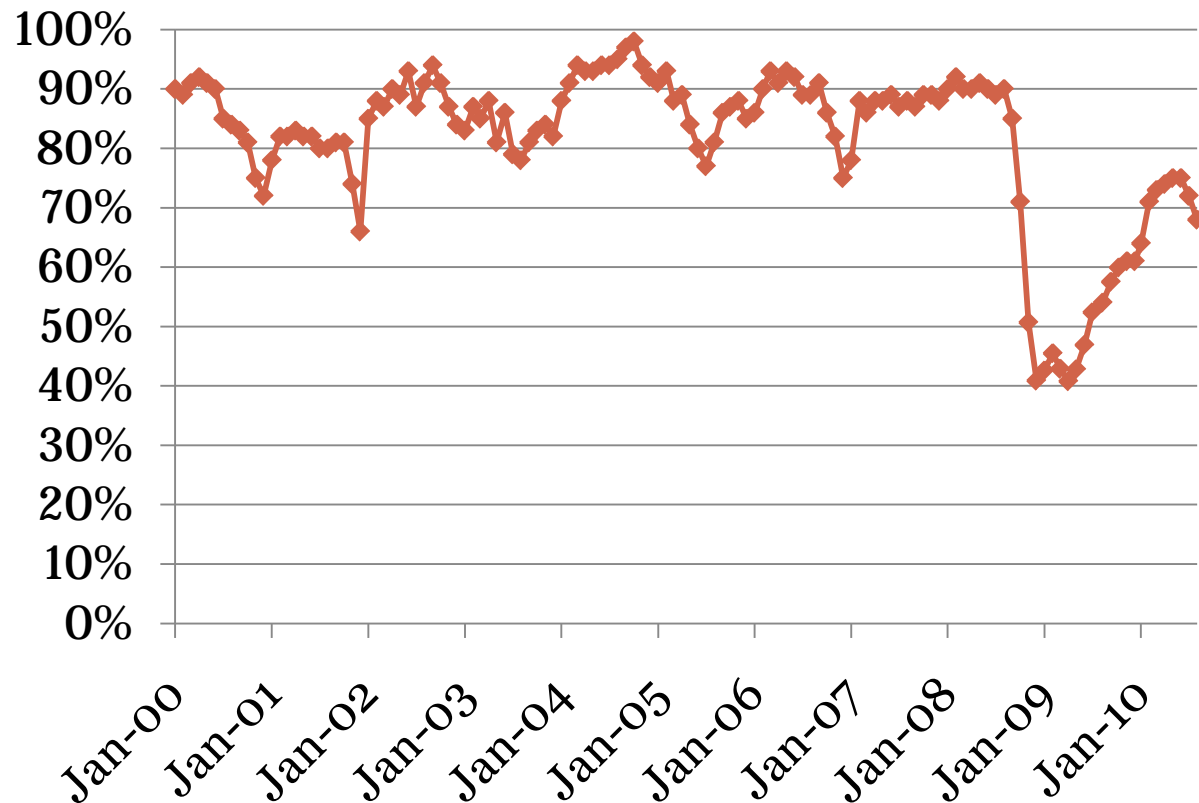


# Iron Ore Tons Mined

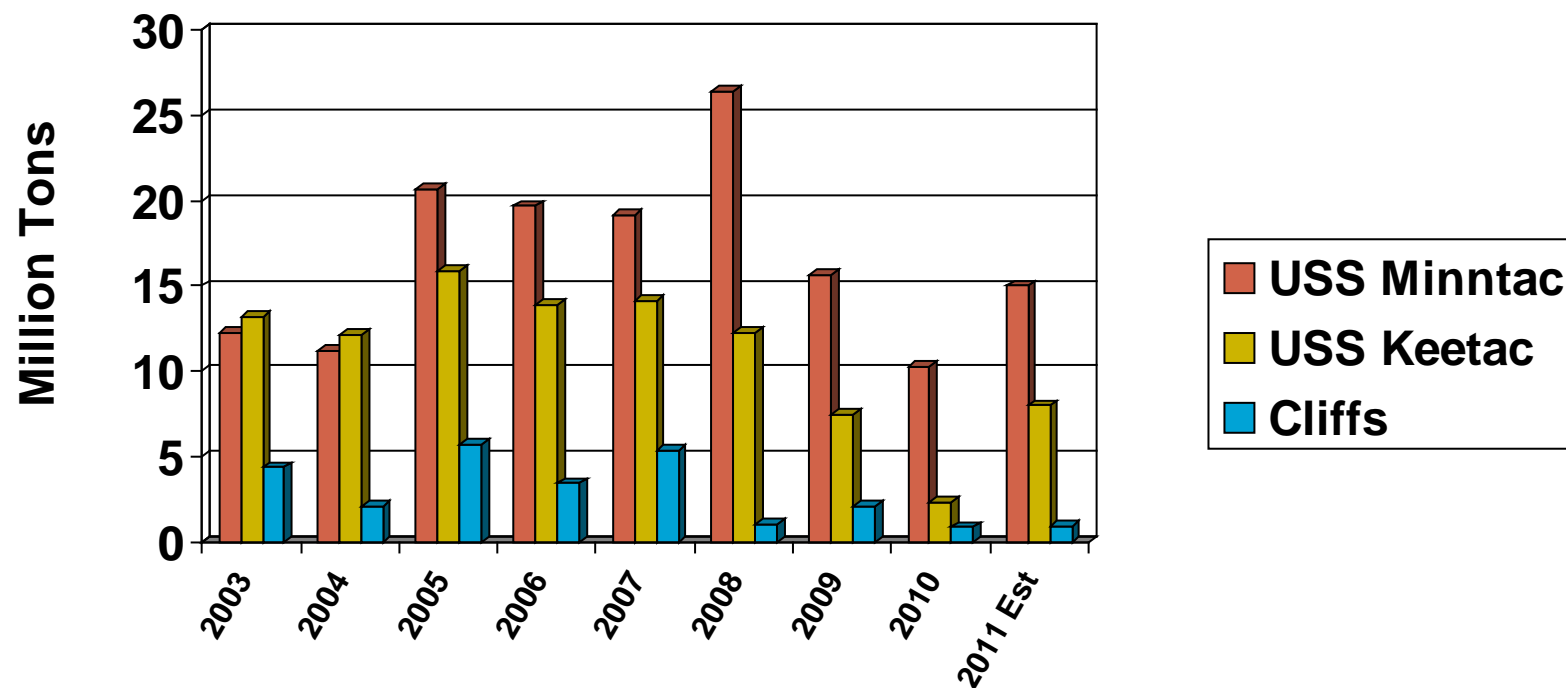




# USA Steel Capacity Utilization



# Who's Mining State Ore

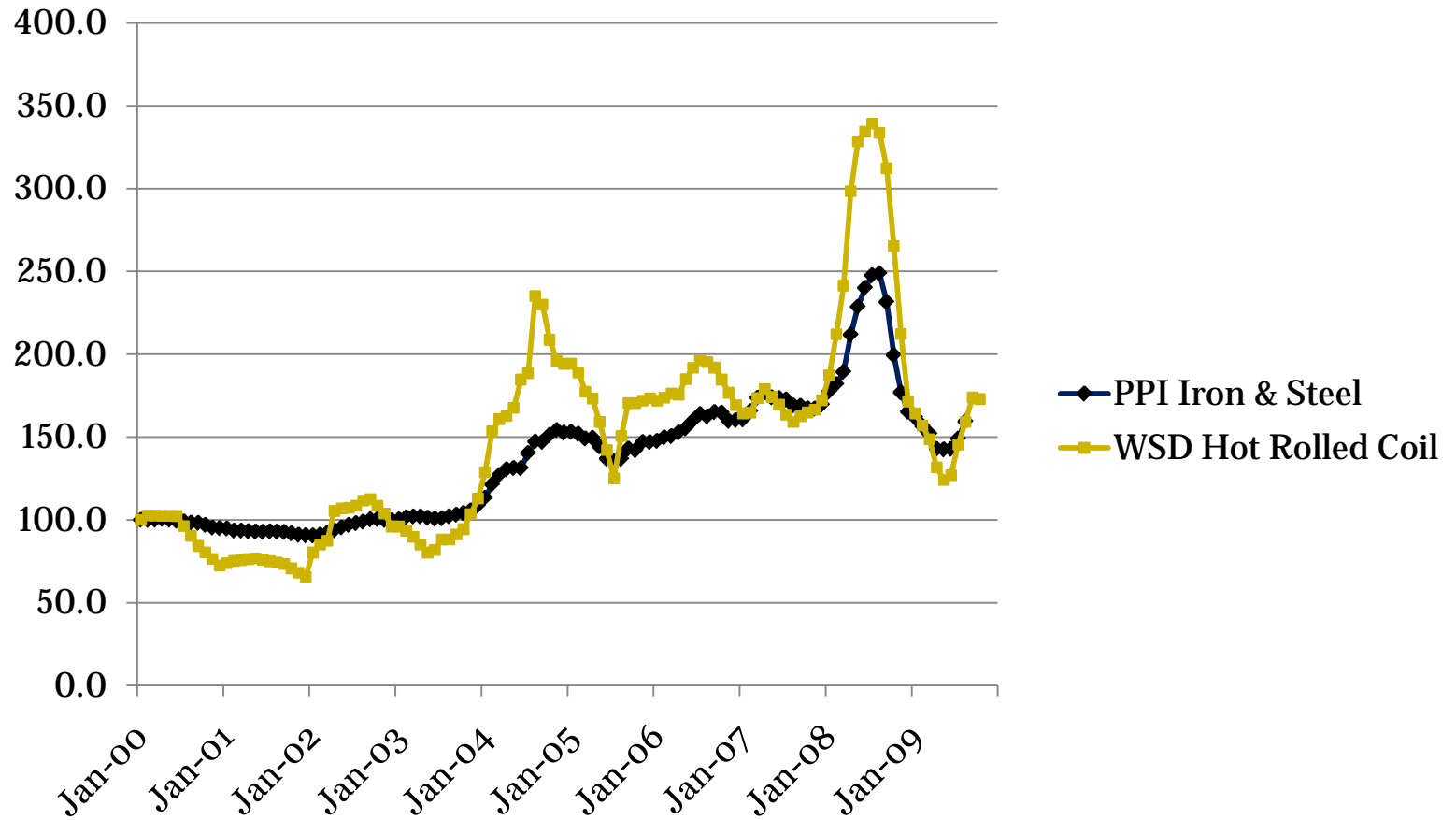


# Royalty Rates

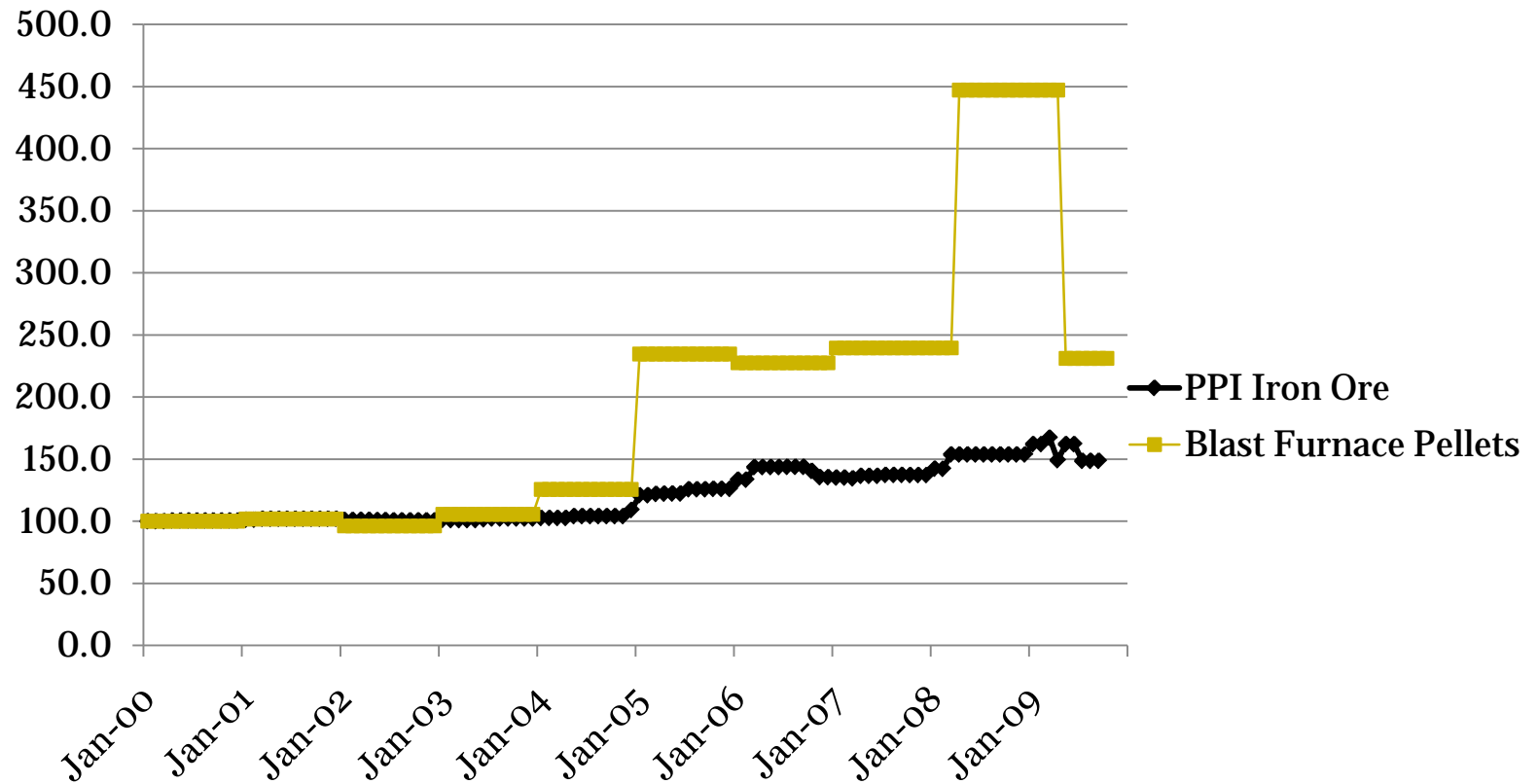


- **Base Price**
- **Escalation**
  - **50% Iron & steel products**
  - **50% Iron ore**

# Iron & Steel Indices



# Iron Ore Indices



# State's Traditional Escalation



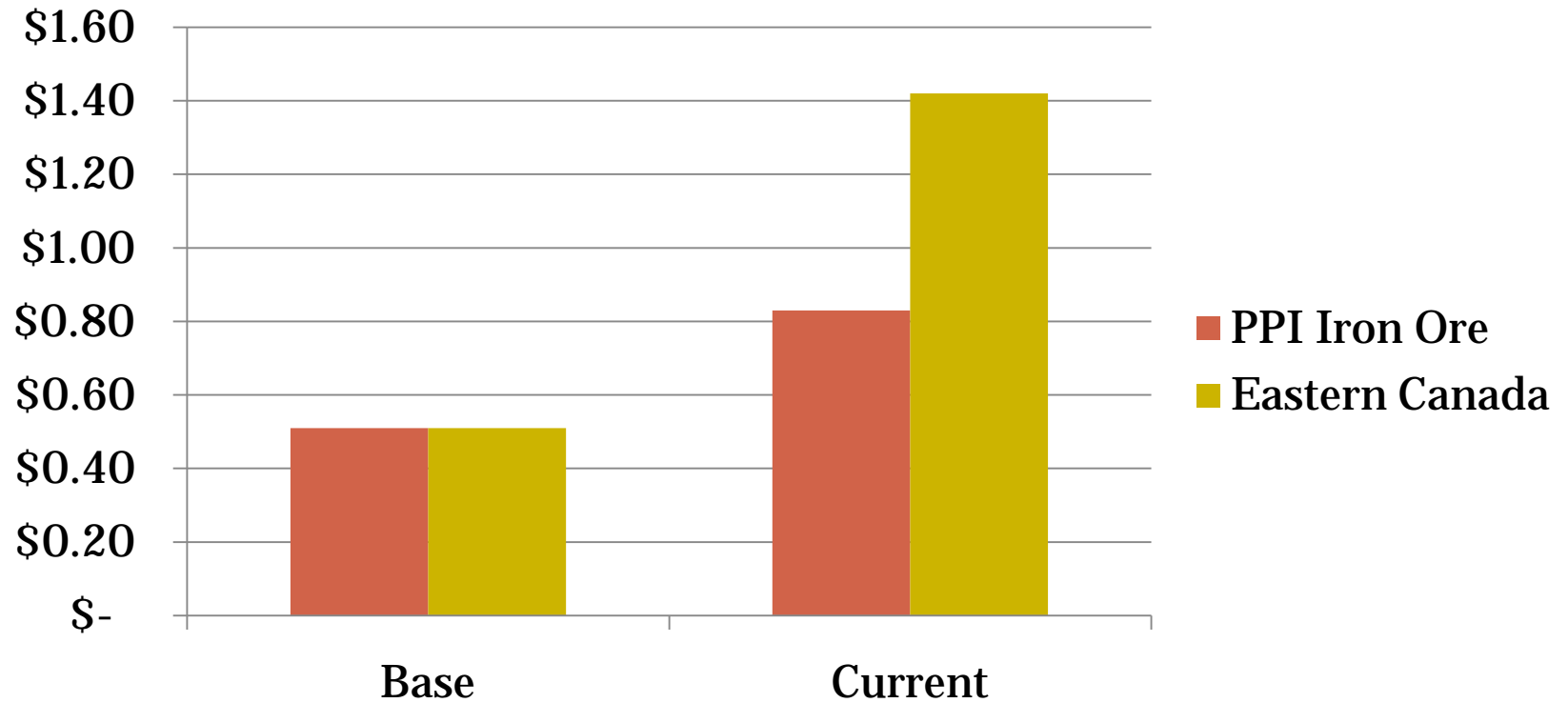
	Base Jan-1998	Current 4 <sup>th</sup> Qtr 2010
Escalation 50% each		
PPI Iron Ore	92.7	138.2
PPI Iron & Steel	129.6	220.0
Royalty per ton	\$0.51	\$0.83

# State's New Iron Ore Escalation



	Base Jan-1998	Current 4 <sup>th</sup> Qtr 2010
Escalation 50% each		
Eastern CN Index	40.00	152.87
PPI Iron & Steel	127.4	220.0
Royalty per ton	\$0.51	\$1.42

# Royalty per Ton



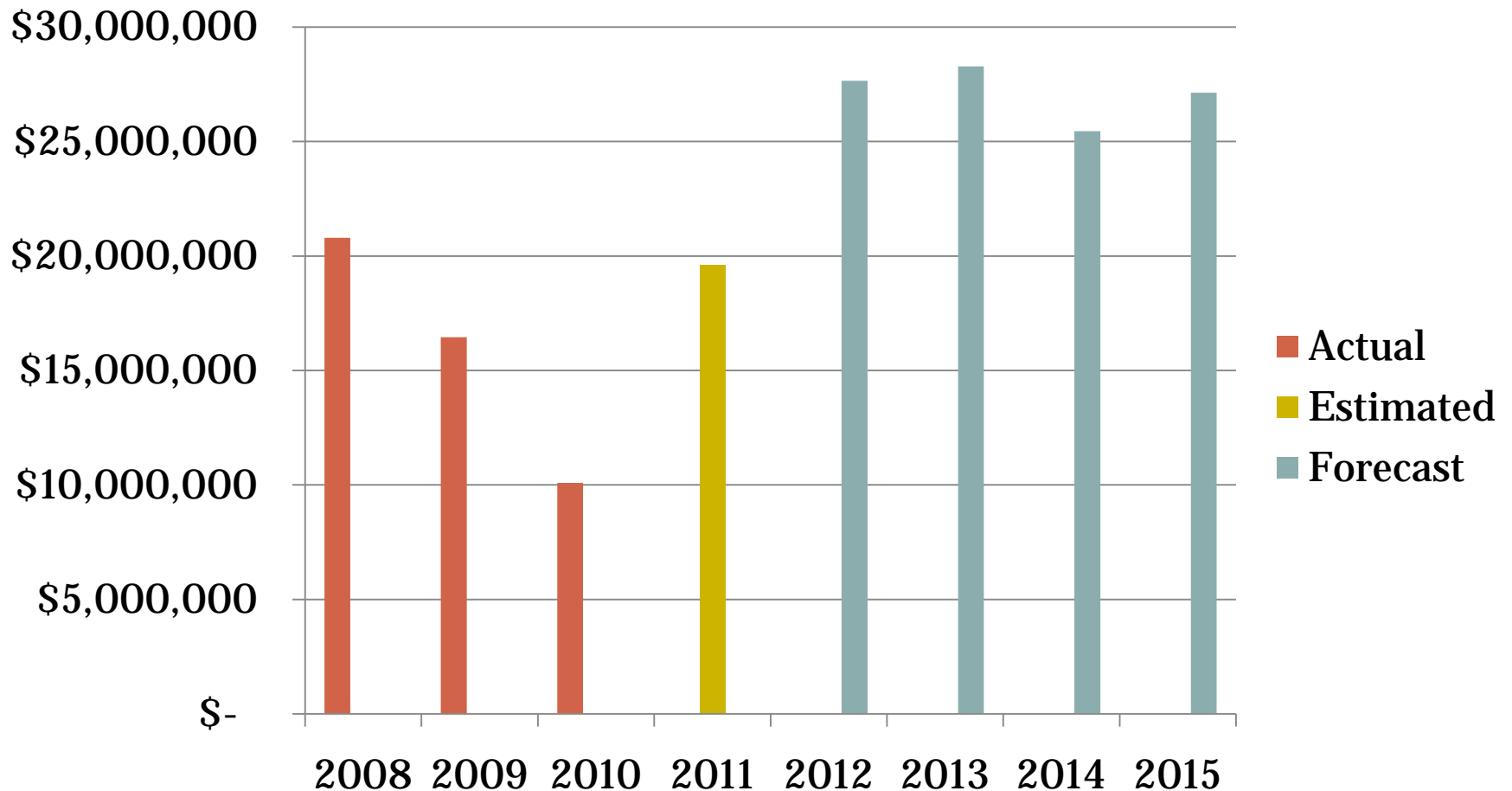


# New Iron Ore Escalation



Company	Mine	State Leases	New Escalation Approved
ArcelorMittal	Minorca	1	September 2008
US Steel	Keetac	6	September 2008
US Steel	Minntac	39	September 2008
US Steel	Keetac	2	March 2009
Essar Steel	Minnesota	27	September 2009
Cliffs Natural Resources	Northshore	3	December 2009

# School Trust Gross Iron Ore Revenue

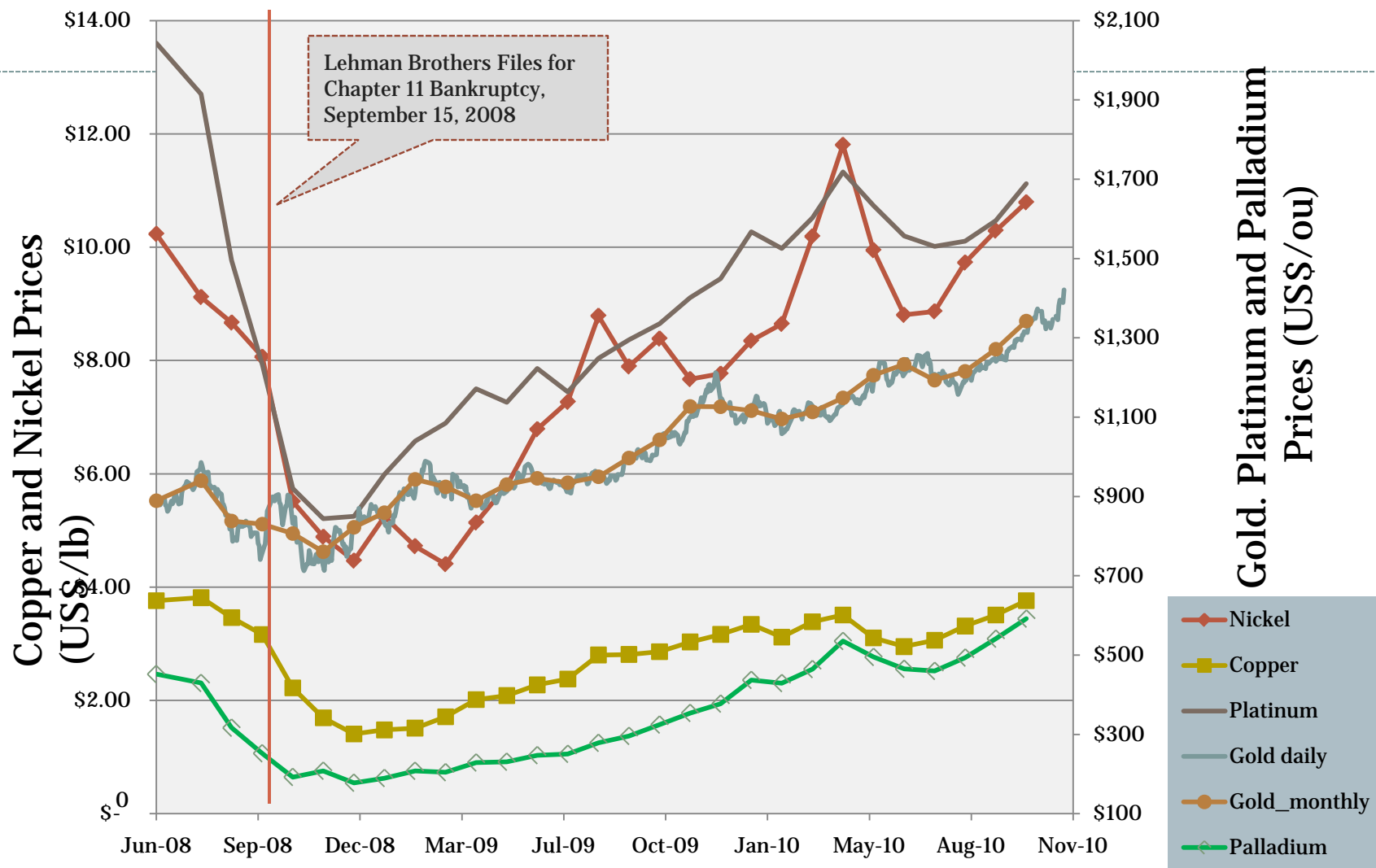


# **Metallic Minerals**



# Copper, Nickel, Gold, Platinum and Palladium Prices

## Since the Lehman Brothers Company Collapse, September 2008



Data Sources: **London Metals Exchange** prices, as reported by:

International Monetary Fund (Cu, Ni)  
Johnson Matthey (Pt, Pd)  
World Gold Council (Au)

Chart last updated on **November 10, 2010** by **MnDNR**

- Monthly averages include October, 2010 data
- Daily gold prices up to LME close, Nov 9, 2010

# **Metallic Minerals**



**What's driving exploration for Metallic Minerals in Minnesota?**

- **Global Demand from Asia**
- **Metal Prices**
- **Investors Desire for Hard Assets**
- **Quantitative Easing**
- **Promising Geological Terranes**

# Metallic Minerals



- ❑ DNR has continued to lease school trust lands for Metallic Minerals (eg. Copper, Nickel, Gold, Platinum, Palladium etc.)
- ❑ The of number of total state leases and leased acres has continued to increase over the past five years

# Metallic Minerals



Year	Leases	Acres
2005	143	46,774
2006	194	67,050
2007	210	69,309
2008	262	84,506
2009	279	90,308
2010	321	105,019

\*Leases on January 1<sup>st</sup> of each year.

# **Metallic Minerals**





- ❑ At the 2010 Metallic Mineral lease sale 14,925 acres of school trust lands were leased (approx. 32% of state acres leased)
- ❑ Approximately 46,000 acres of school trust lands are currently under a metallic mineral lease (approx. 31% of state acres leased) (approx. 143,000 total state acres leased)

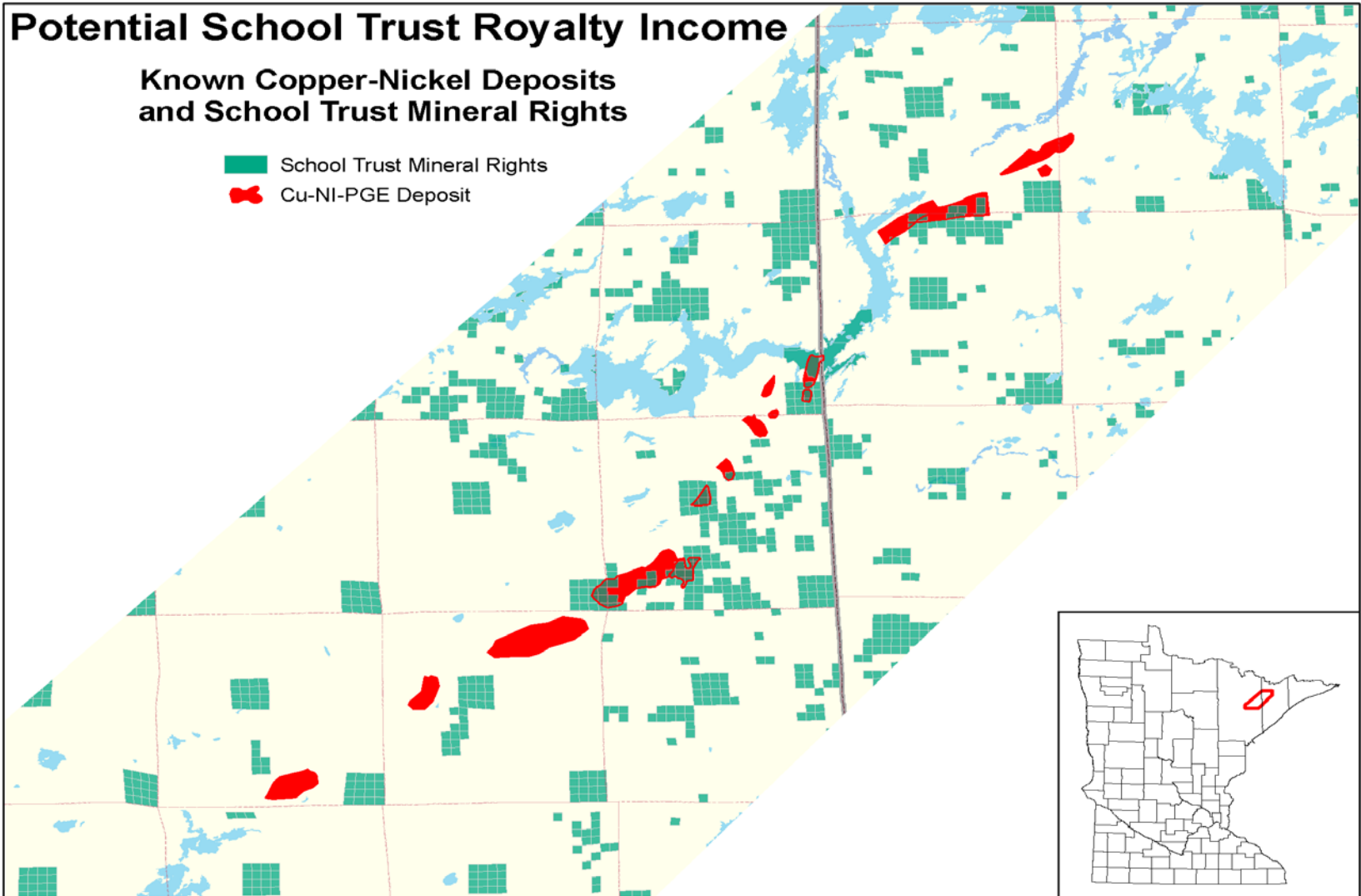


# Non-ferrous minerals projects

## Potential School Trust Royalty Income

### Known Copper-Nickel Deposits and School Trust Mineral Rights

-  School Trust Mineral Rights
-  Cu-Ni-PGE Deposit



# Metallic Minerals



- **Mineral management** activities include the following:
  - Drafting mineral leases and negotiating lease rates
  - Title research
  - Maintaining mineral rights information
  - Monitoring global commodity demand and metal markets
  - Determining ore quality

(continued)

# **Metallic Minerals**



- **Conducting field inspections**
- **Developing technical information on mineral resources, and**
- **Managing iron ore cooperative research related to taconite facilities and the minerals diversification program**

# Metallic Minerals



- Four mining proposals are currently going through environmental review and have applied for mining permits.
- They include PolyMet Mining Corp. with funding from Swiss metal house Glencore International; Mesabi Nugget's plant and mine owned by Steel Dynamics, Inc.; U.S. Steel's Keewatin Taconite plant and mine expansion applications; and Essar Steel Minnesota's (Essar Global Limited, India) project change for increased mining.

# Metallic Minerals



- Other mineral exploration and development projects include Cooperative Mineral Resources' manganese project near Emily; the Duluth Metals' (Antofagasta Minerals, Chile, SA) Nokomis project near Ely; Franconia's project on Birch Lake, near Babbitt; and Kennecott Exploration's (Rio Tinto) site in Aitkin County.

# Minerals Management Account



- 20% of income generated from mining is directed to the DNR Minerals Management Account; the remainder is distributed as directed by law. For school lands, 80% of the mineral lease revenue goes straight to the corpus of the PSF.

- The Legislature appropriates money from the Minerals Management Account to the DNR for minerals management activities. In FY 09 and FY10 this appropriation was for \$2.896 million each year.

# Minerals Management Account



- The Minerals Management Account was created to have a \$3 million principal, to be drawn down in the event that future income generation drops. This contingency amount was achieved in FY07.

- At the end of each fiscal year, the amount in the Minerals Management Account that exceeds \$3 million is distributed to the school and university trust funds in the same proportion as total mineral lease revenue received in the previous biennium from school and university lands.

# Minerals Management Account

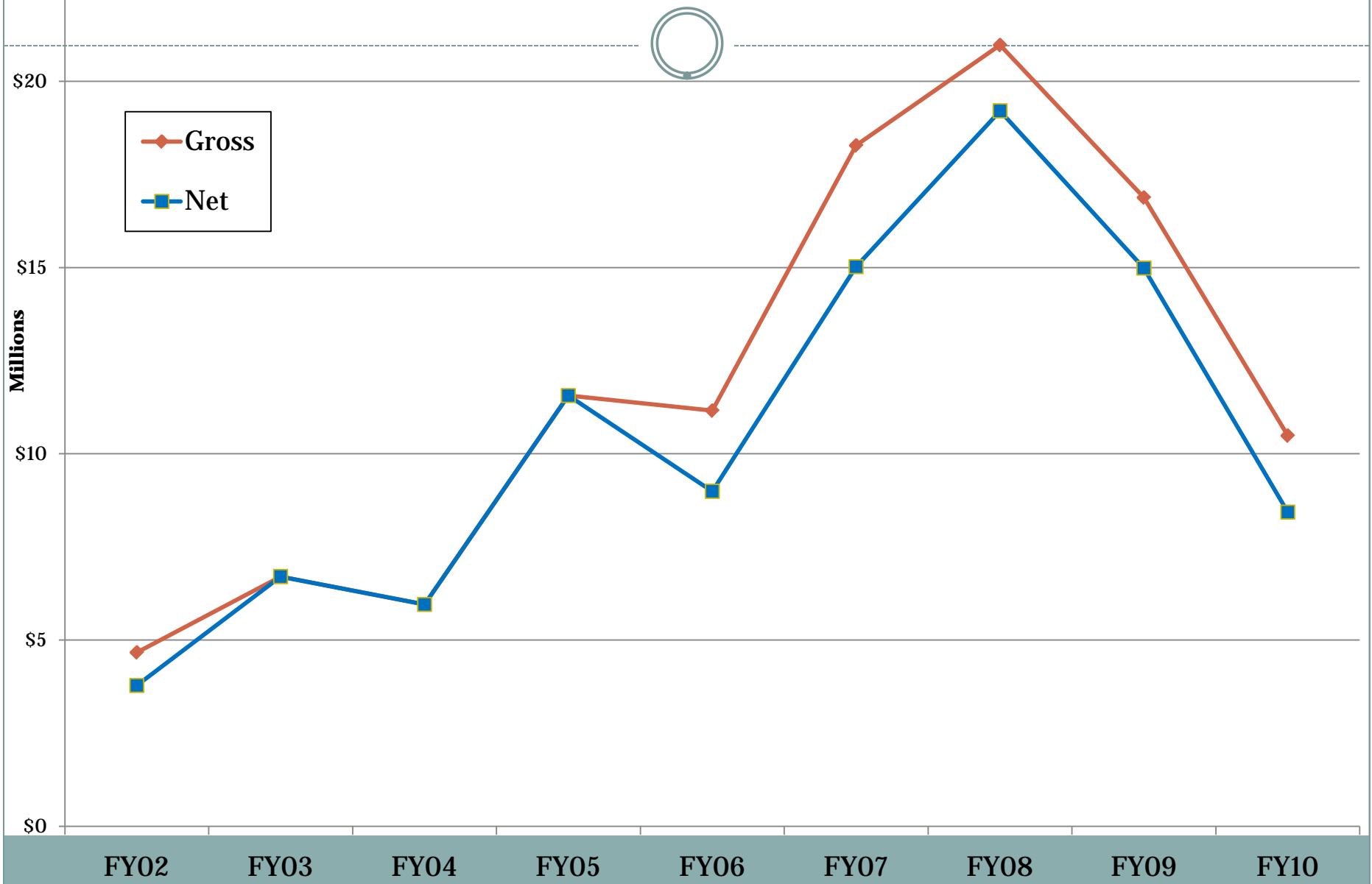


- At the end of FY07, the PSF received \$1.729 million as its distribution from the Minerals Management Account. FY08 distribution is \$2.385 million. FY09 distribution is \$1.36 million. FY10 distribution is \$20,000.

- Result is that mineral management costs for school lands were:
  - 20% for FY06
  - 9.3% for FY07
  - 8.4% for FY08
  - 11.3% for FY09
  - 19.6% for FY10



# Gross and Net Minerals Revenue (School), FY 02-10



# Thank you.



**CONTACT INFORMATION:**  
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