

Wisconsin Legislative Council

Special Committee on Wisconsin's Transportation Infrastructure

Presentation by

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City of La Crosse Harbor Commission

November 17, 2004

**Presentation slides courtesy of
Kent Pehler, Brennan Marine**



MARINE PROFESSIONALS





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PORT OF LACROSSE COMMERCIAL INFRASTRUCTURE

Imports/Exports 1,246,000 tons of cargo valued at \$153,875,000

Employs 89 with a payroll of \$3,530,000

Pays local property tax of over \$400,000

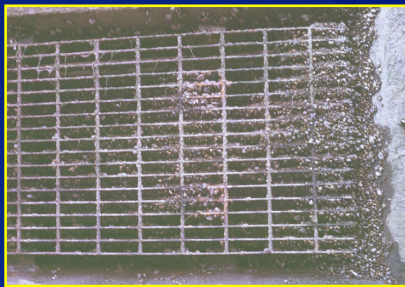
PORT OF LACROSSE MODE SHIFT FROM BARGE TO TRUCK

- **La Crosse annually imports/exports 1,246,000 tons of commodities, requiring 55 – 15 barge tows at 22,500 tons each**
- **Comparatively, the total La Crosse annual tonnage shift via truck would require 49,840 trucks and over 600 miles of road space. If lined up bumper to bumper, this would be a chain of trucks from La Crosse, WI and south past St. Louis, MO to Cairo, IL.**

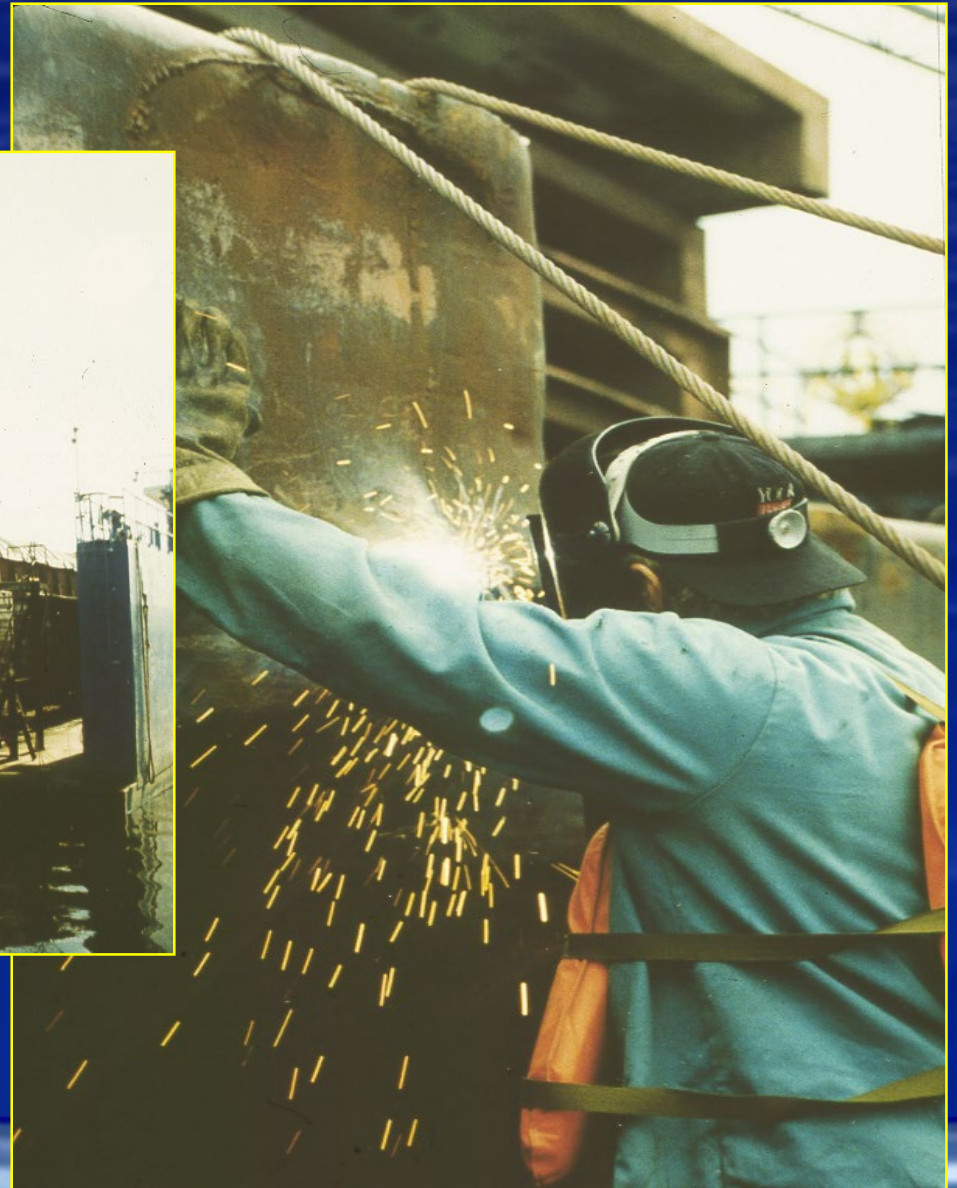
IMPACTS OF MODE SHIFT (BARGE TO TRUCK)

- **Increased Hydrocarbons** • **Increased Emissions** • **Increased Accidents**

Vessel Repair



Barge Repair



Barge Cleaning



Switching



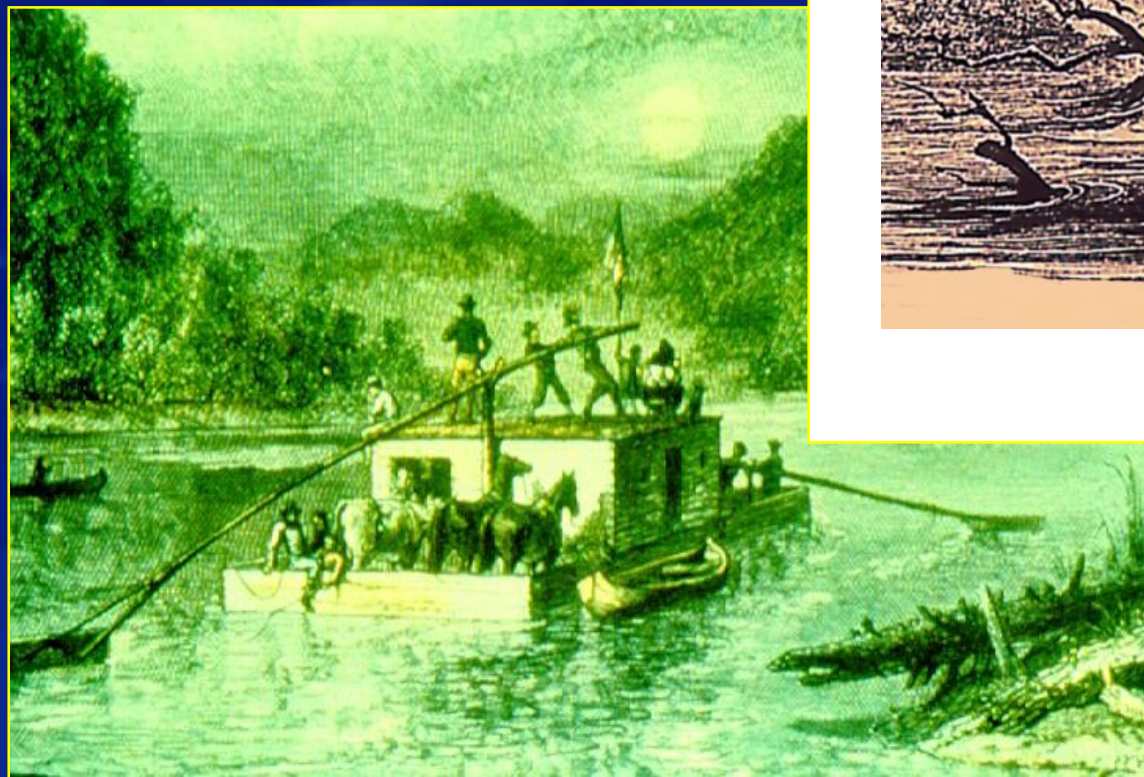
Fleeting



Short-haul Towing







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PRIOR TO BUILDING LOCK AND DAMS:

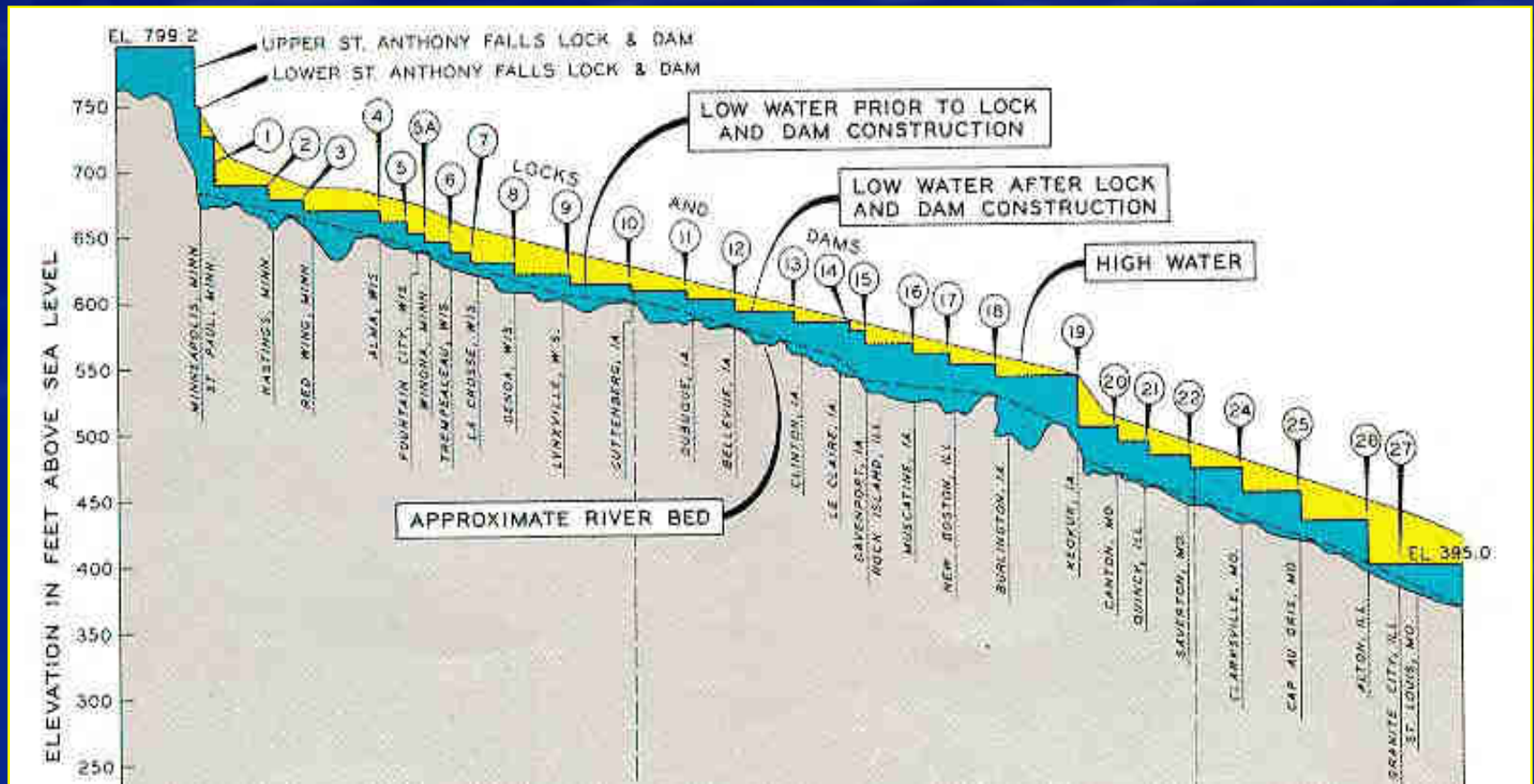
- During low water, no continuous channel existed
- From St. Paul to the St. Croix River, the controlling depth at low water was 16 inches
- From the St. Croix to the Chippewa River (about 150 miles downriver), it reached 18 inches
- Over the next 132 miles, from the Chippewa to the Wisconsin River, the Mississippi gained only 2 inches, making the low water depth 20 inches
- And from the Wisconsin to the Illinois River (a distance of about 412 miles), it attained 2 feet.

It is not just folklore that people once waded across the Mississippi

“The River We Have Wrought”

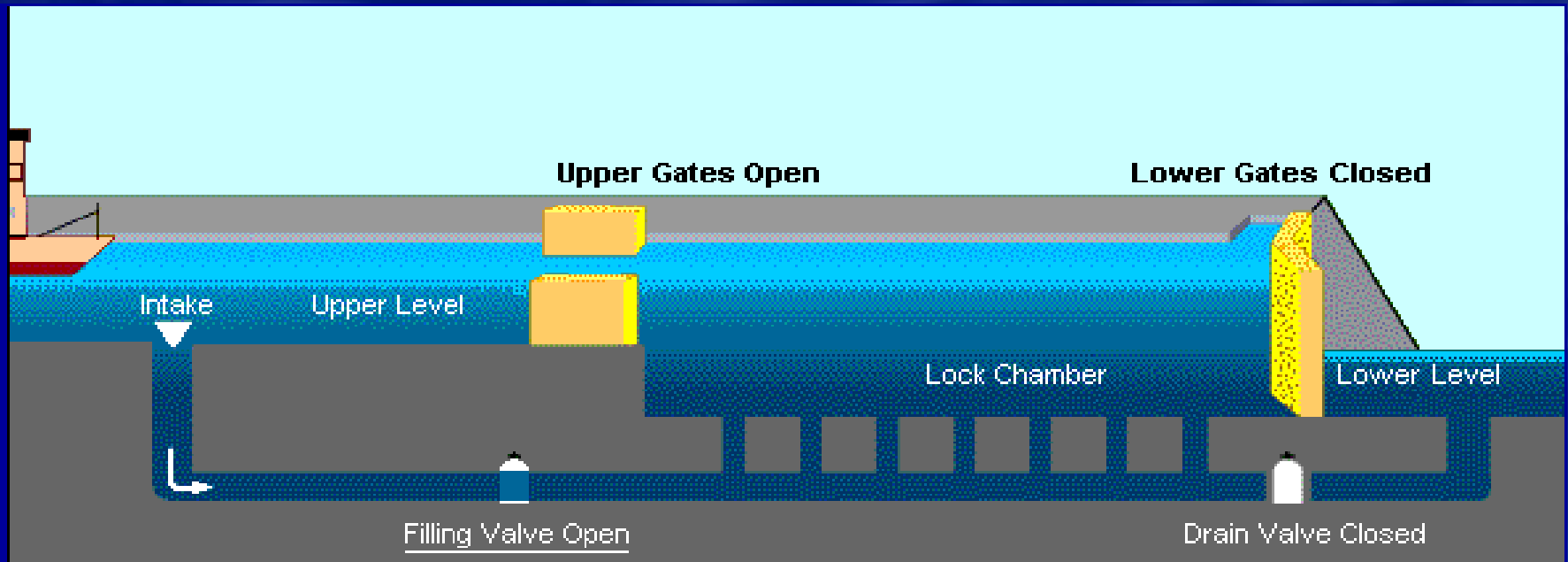
A History of the Upper Mississippi

John O. Anfinson





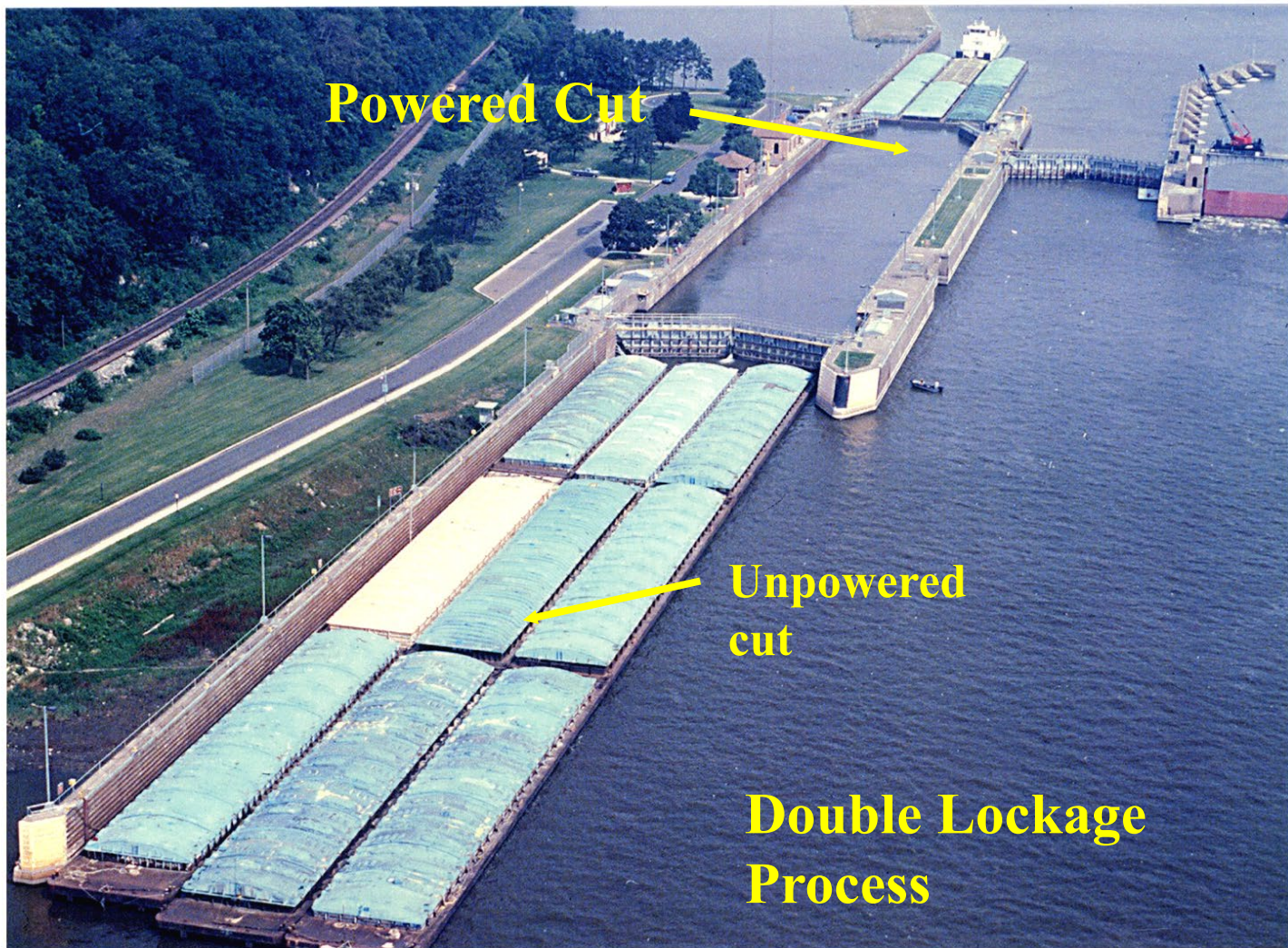
Locking Downstream



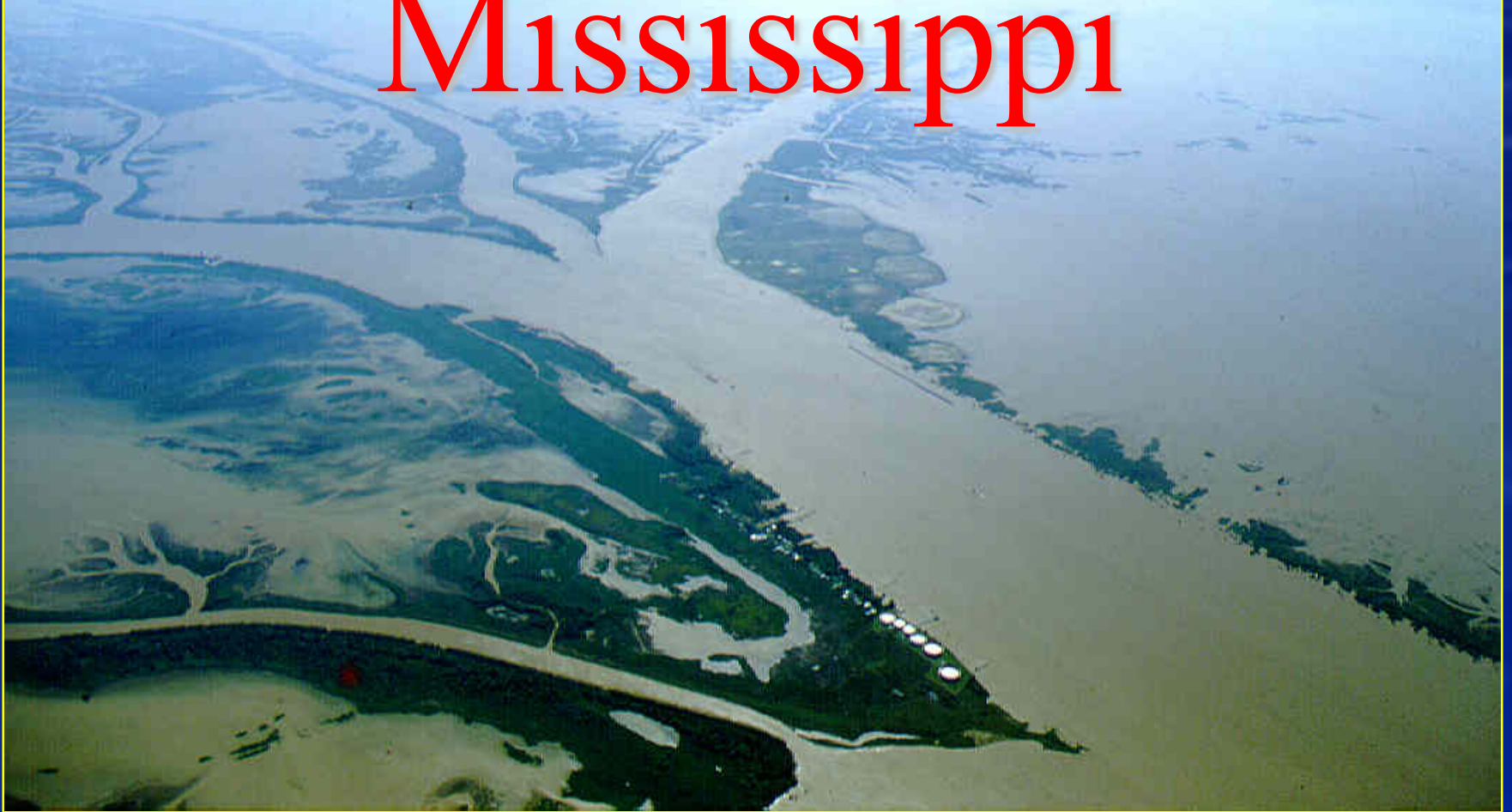
1. **THE LOCK CHAMBER IS FILLED** with water from the **UPSTREAM RIVER**. Then the **UPPER LOCK GATE IS OPENED** AND THE **TOW ENTERS** the **CHAMBER**
2. With the **TOW** in the **CHAMBER**, the **UPPER GATE IS CLOSED**. The **VALVES** are **OPENED** and the **WATER LEVEL IS LOWERED**.
3. When the **WATER LEVEL IS EVEN** with the **DOWNSTREAM RIVER**, the **LOWER GATE IS OPENED** and the **TOW LEAVES** the **CHAMBER..**

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The Mighty Mississippi



MISSISSIPPI RIVER NAVIGATION SYSTEM



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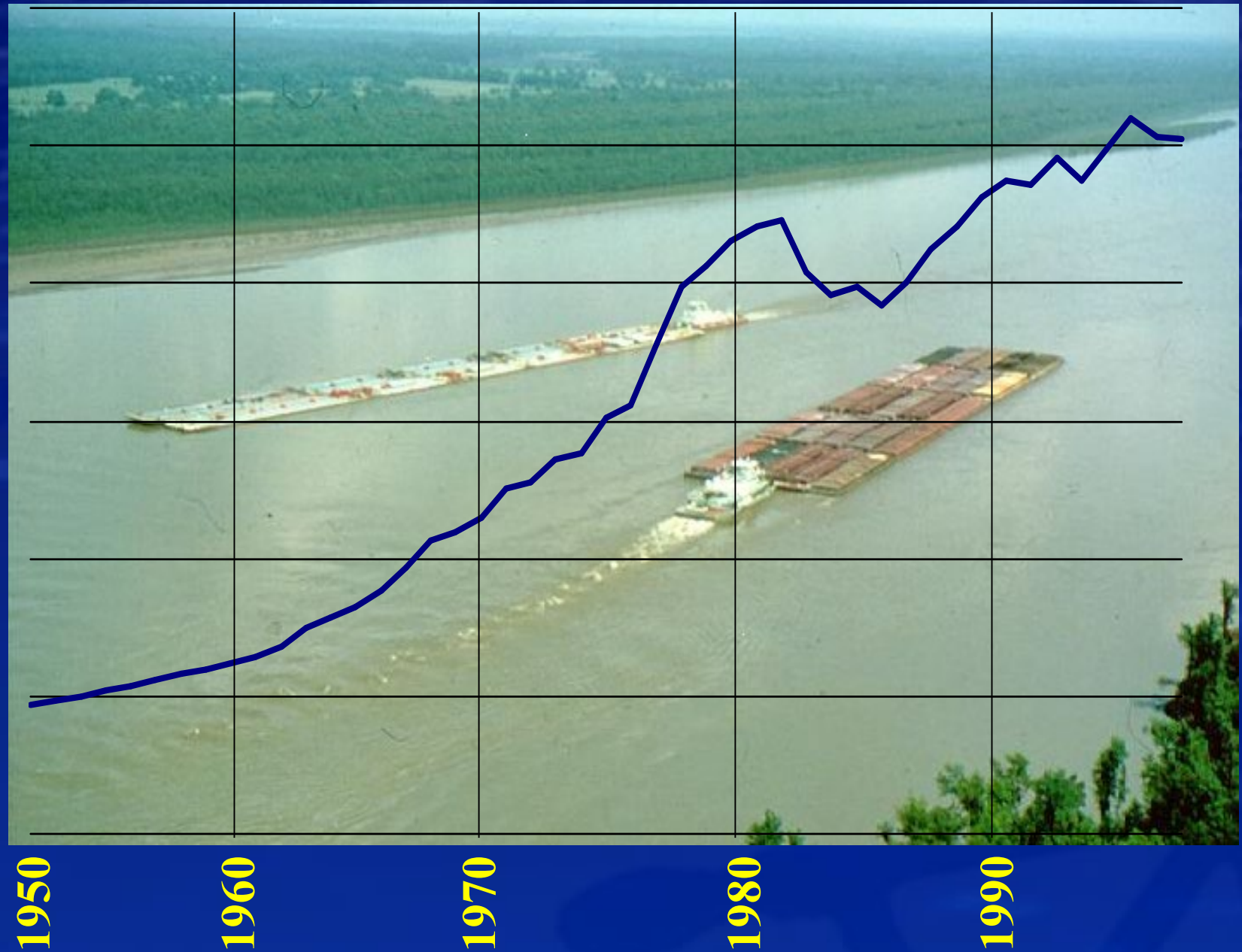


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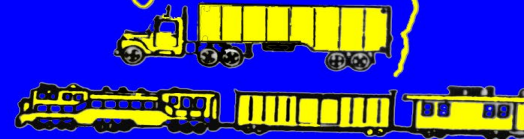
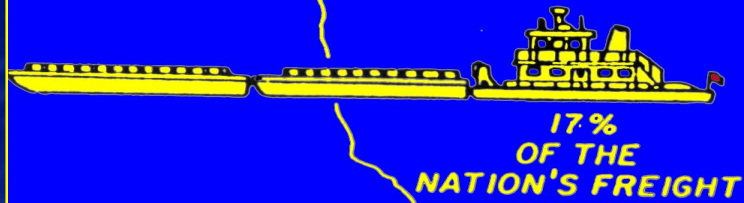


MILLION
TONS

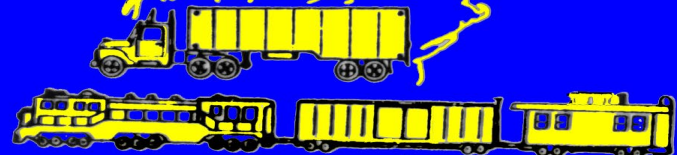
MISSISSIPPI RIVER



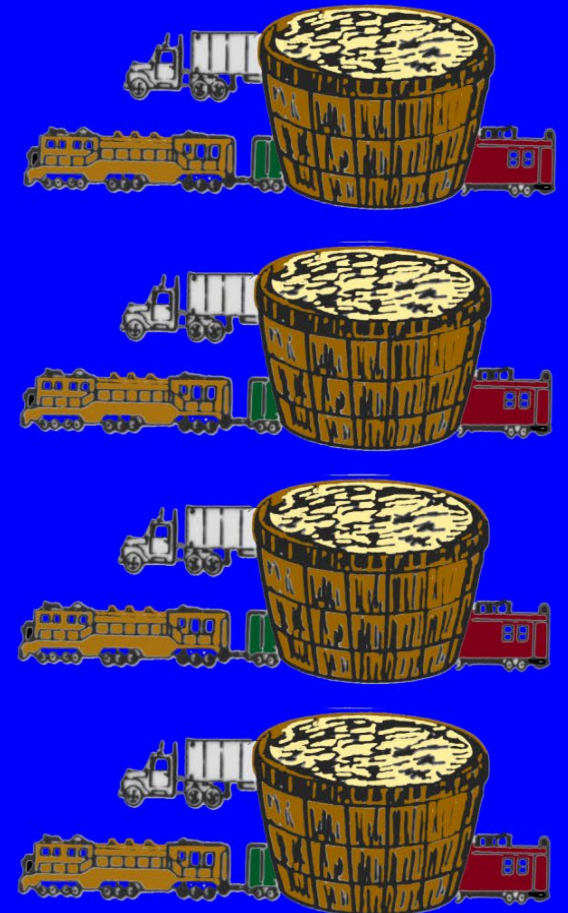
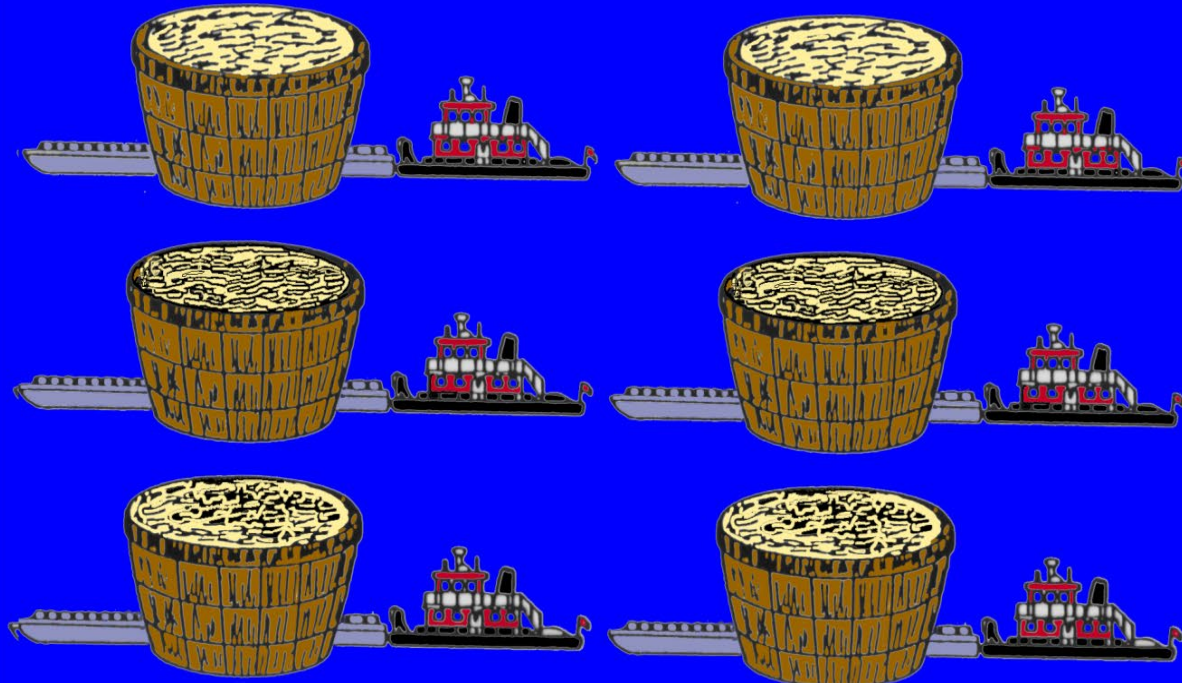
FREIGHT MOVEMENT



COST



60% OF THE GRAIN GROWN IN MINNESOTA FOR EXPORT IS SHIPPED BY BARGE



1995 COMMODITIES SHIPPED UPPER MISSISSIPPI RIVER (Millions of Tons)

Corn – 31.5

Coal – 22.3

Aggregate – 8.6

Petroleum – 14.3

Beans – 11.7

Iron/Steel – 10.1

Misc. Items – 6.5

Chemicals – 5.0

Fertilizers – 4.5

Wheat – 4.3

Other Farm

Commodities – 1.6



QUANTITY SHIPPED

1995

- Total U.S. Waterborne Commerce
1.1 Billion Tons (1/2 is Inland)
- Total MISSISSIPPI RIVER
292 Million Tons
 - UPPER MISSISSIPPI RIVER
130 Million Tons



1997 FACTS: MINNESOTA & WISCONSIN COMMODITIES

Wisconsin

- Shipped & received nearly 3.9 million tons
- Tonnage valued at \$314 million
- Generates 430 direct jobs, \$2.5 million payroll tax. In direct employ 3,214, \$15 million payroll tax.
- Water transportation is essential for transportation of grain, fertilizer, cement, coal, steel, aggregates, and petroleum products.

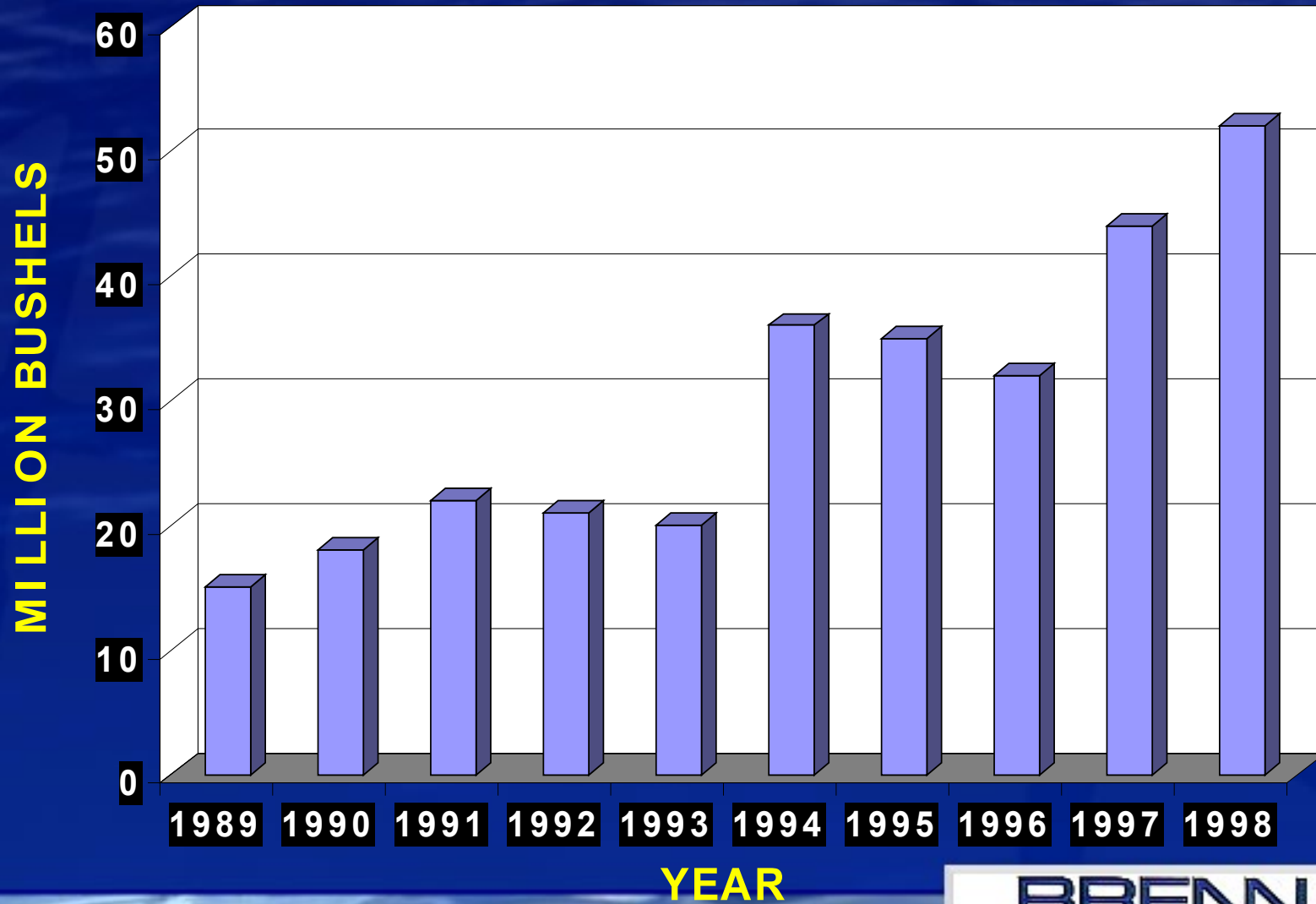
Minnesota

- Shipped & received nearly 14.4 million tons
- Tonnage valued at +\$1.5 billion
- Commodities include: grain, coal, cement, salt, aggregates & petroleum
- The water transportation sector of the grain industry directly employs only a few hundred workers, yet produces \$ 4 million of state and federal taxes.

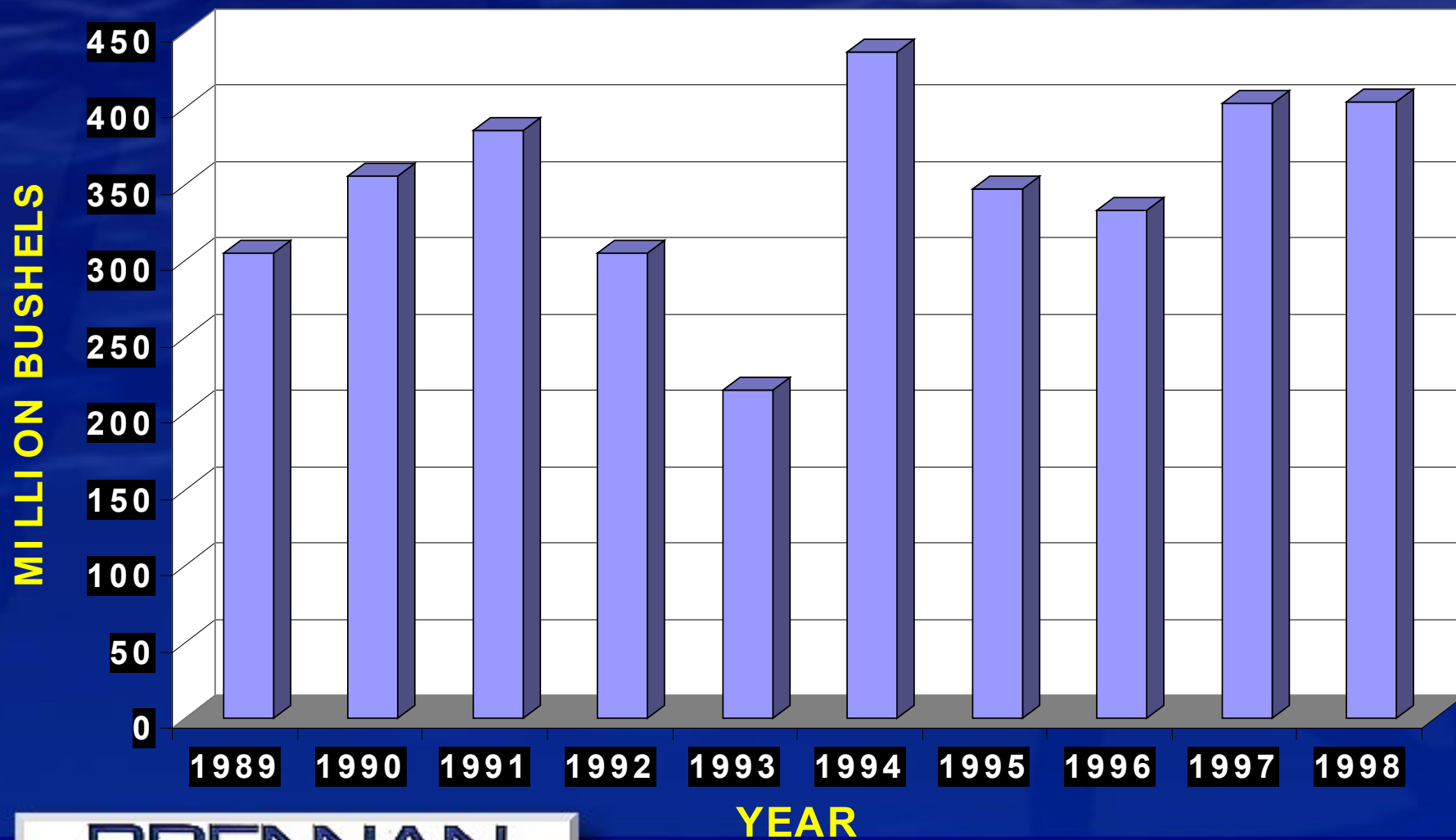
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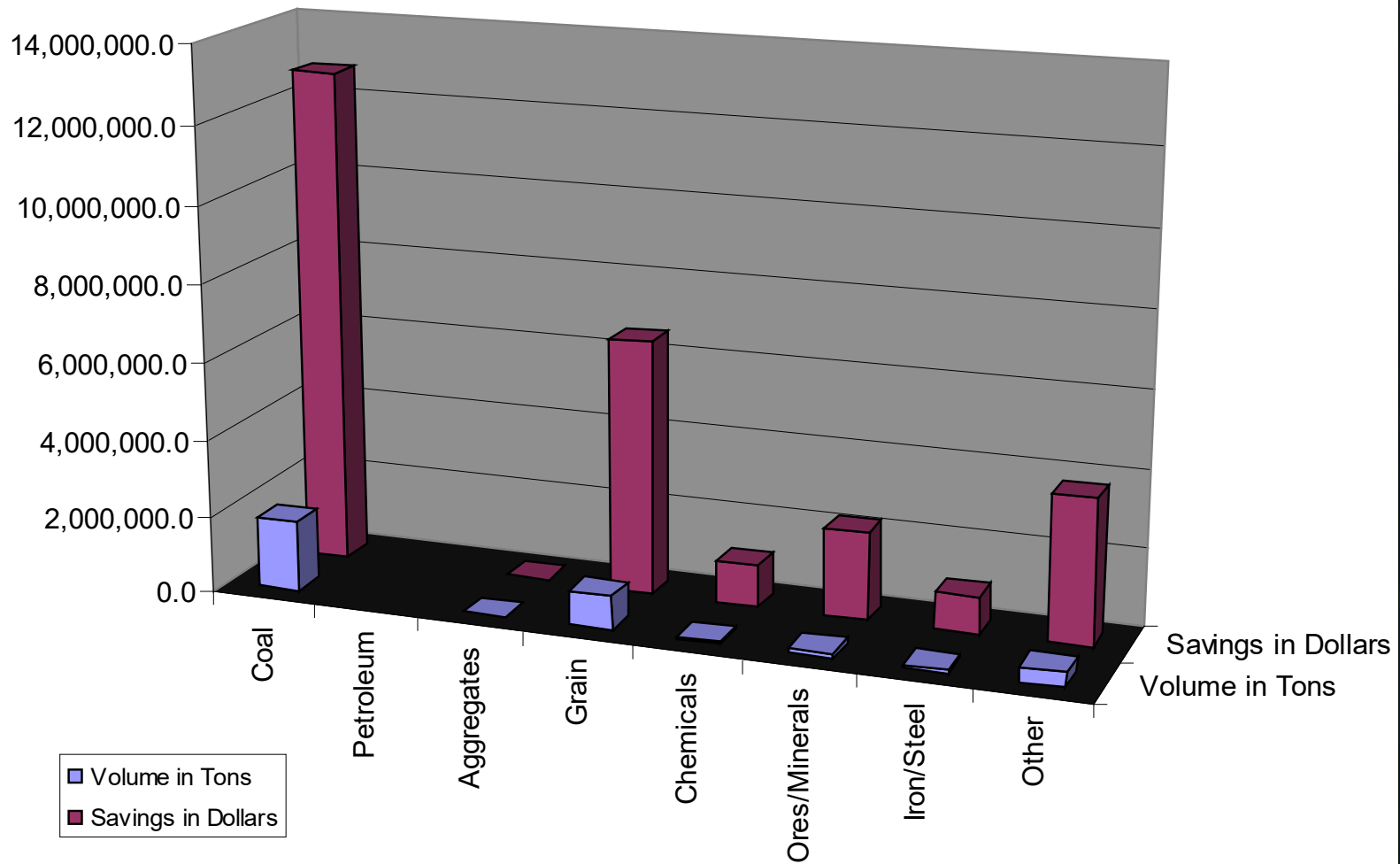
WISCONSIN SOYBEAN PRODUCTION



WISCONSIN CORN PRODUCTION

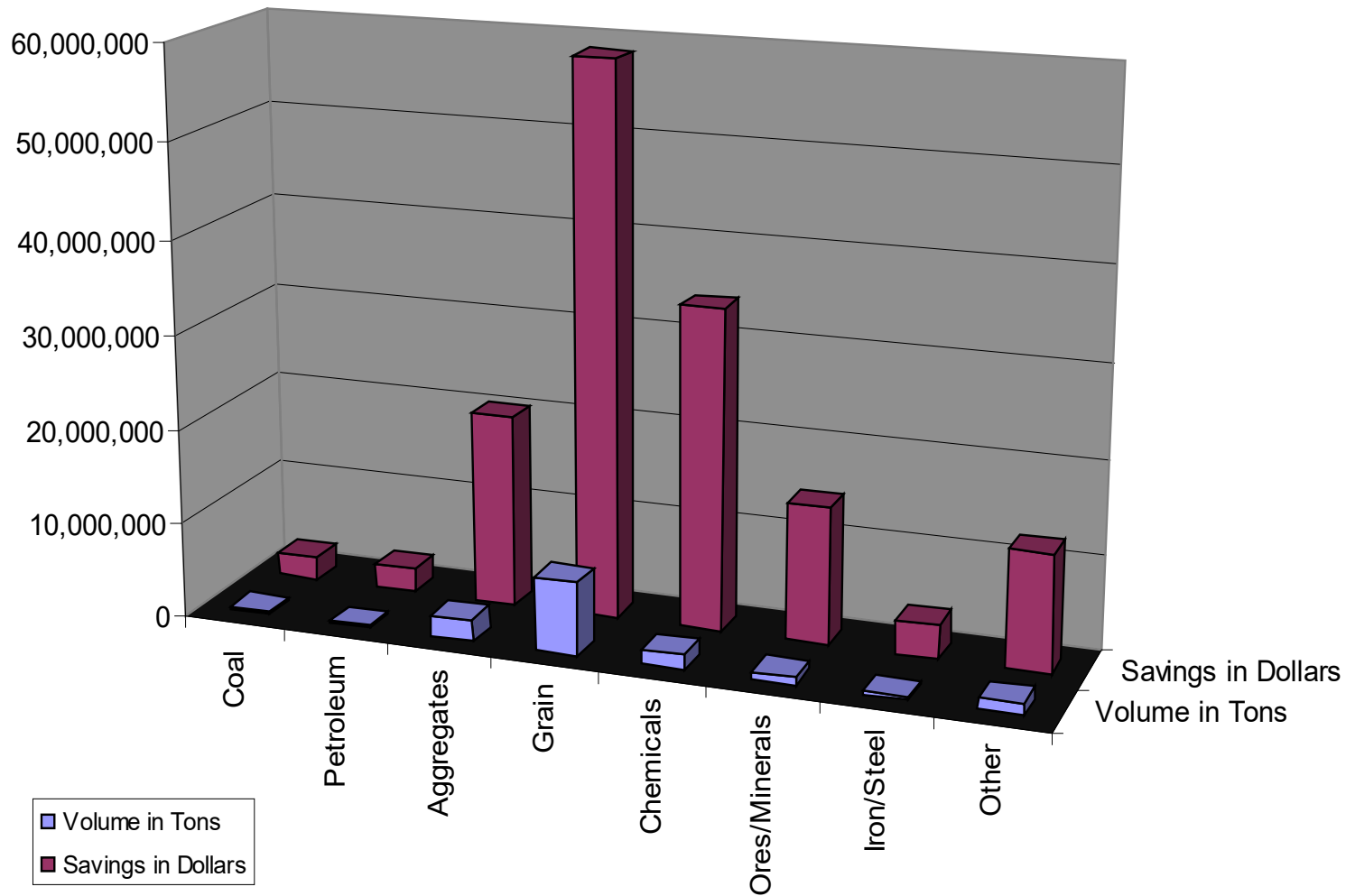


1997 FACTS: WISCONSIN Inland Waterway Commerce



1997 FACTS: MINNESOTA

Inland Waterway Commerce



1997 FACTS: MINNESOTA & WISCONSIN COST EFFECTIVENESS

**Shippers save \$175.9 Million
shipping via UMR Waterway**



COST EFFICIENCY OF TRANSPORT MODES

Truck = \$20.3 mills per ton mile

Rail = \$3.3 mills per ton mile

Barge = \$1.2 mills per ton mile

*River System is 63% lower cost than Rail
and 94% lower cost than Truck.*



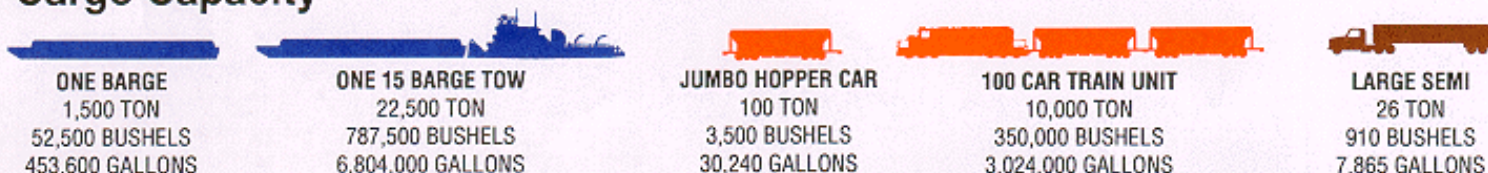
Compare...



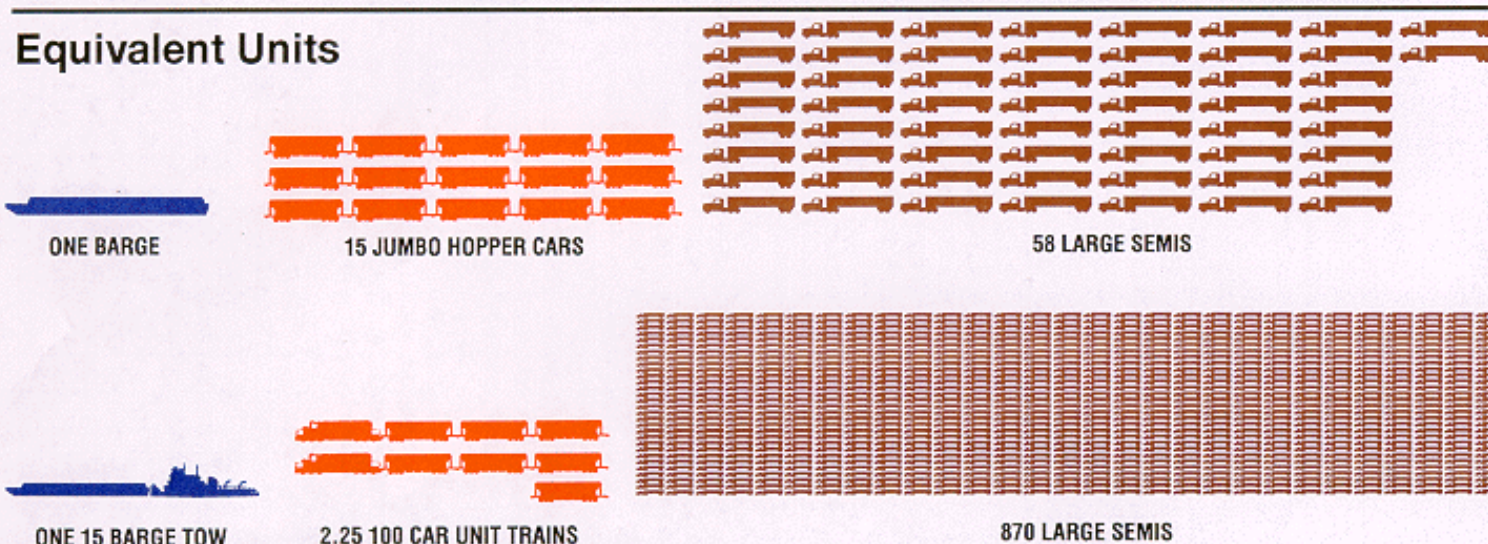
Iowa Department
of Transportation

Source: Iowa Department of Transportation - 800 Lincoln Way - Ames, IA 50010 - 515-239-1372

Cargo Capacity



Equivalent Units



Equivalent Lengths



1997 FACTS: MINNESOTA & WISCONSIN EFFICIENCY

In 1997, over 300 million bushels of grain were shipped to/from Minnesota & Wisconsin combined, carried in **5,760 barges**.

Alternative Methods:

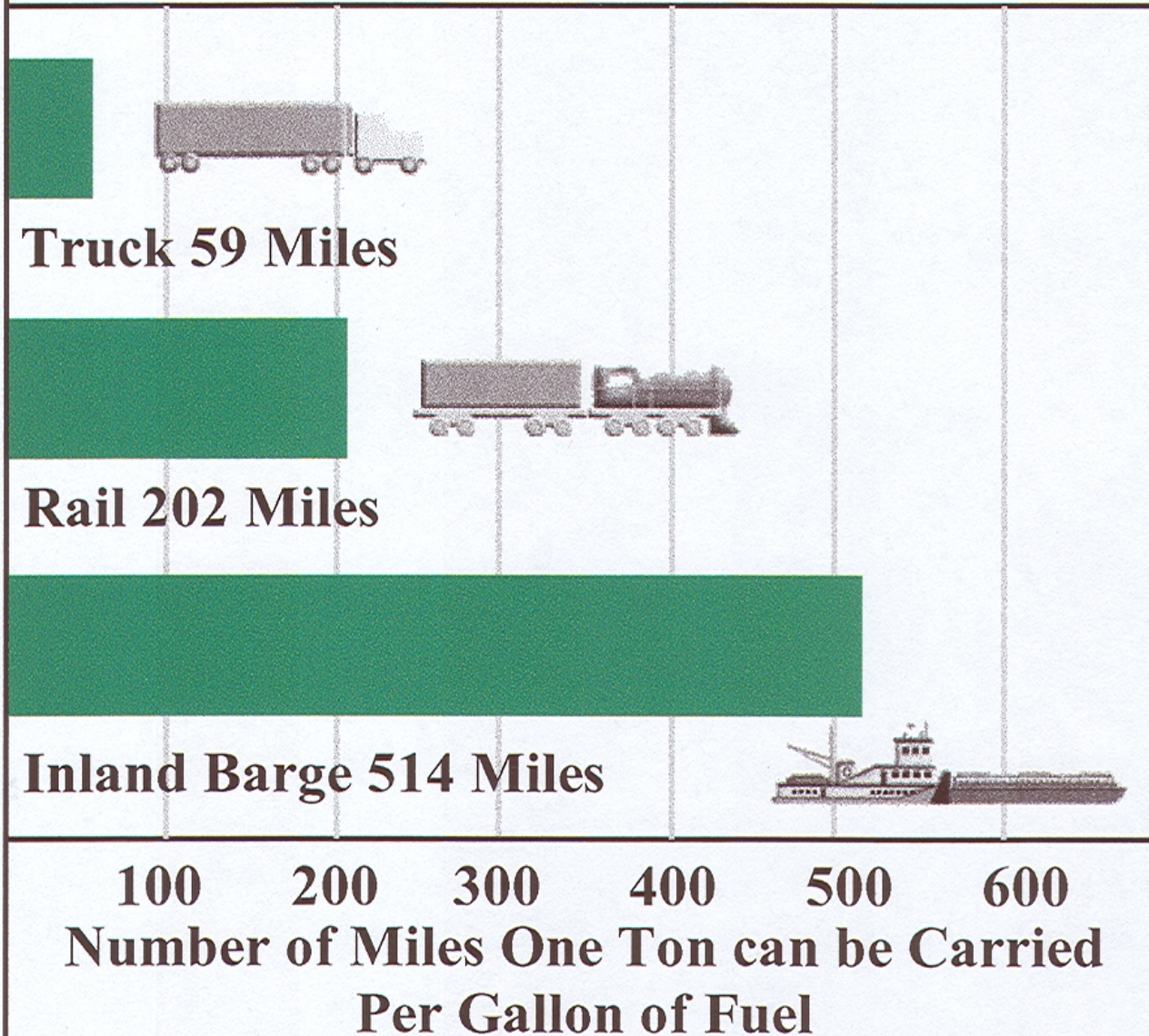
86,397 Rail Cars

OR

345,590 Trucks



RELATIVE ENERGY EFFICIENCIES



ENVIRONMENTAL IMPACTS OF MODAL SHIFTS

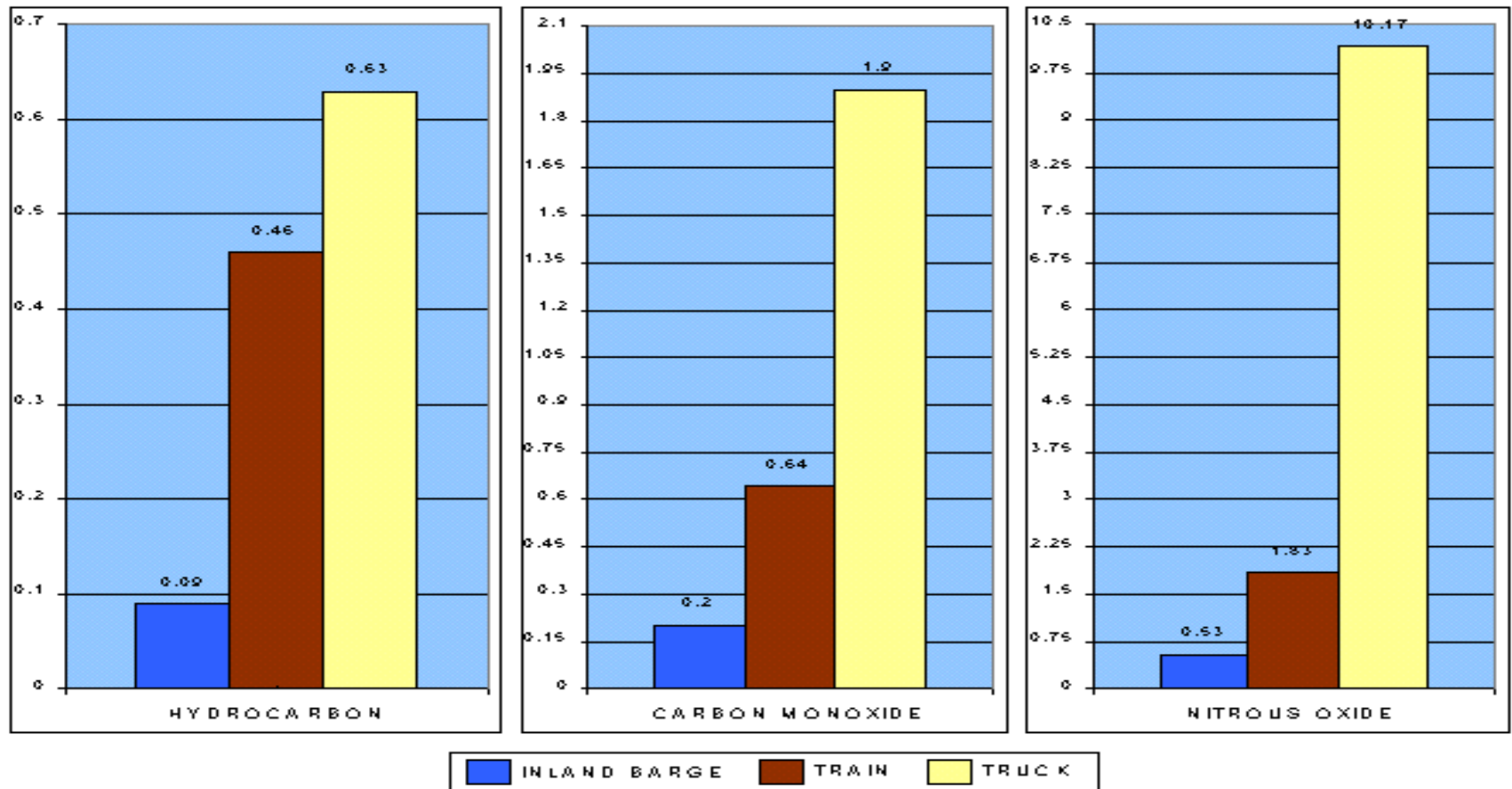
Barge to Rail (Annual changes)

- Fuel use grows by 331%
- Emissions jump by 470%
- Probable accidents grow by 290 %



EMMISSIONS PRODUCED

Pollutants (in pounds) produced in moving one ton of cargo 1,000 miles



ECONOMIC IMPACTS:

(Upper Mississippi River)

JOBS:

- 154,000 (direct)
- 245,000 (indirect)



ECONOMIC IMPACTS:

(Upper Mississippi River)

FINANCIAL:

- **\$4 Billion (jobs)**
- **\$ 11-14 Billion (business)**

OTHER SAVINGS:

- **\$ 600 Million vs. Truck or Rail**
- **Plus another \$900 Million in lack of need for infrastructure repairs**

FEDERAL SUPPORT OF THE INLAND WATERWAY

IS IT “CORPORATE WELFARE”??

NO!!!!!!

“The public receives \$8 in benefits for every
\$1 the the federal government spends on
Waterways Programs”



U.S. EXPORTS

The United States exports about 25% of its agricultural production and, for crops, one acre out of every three moves to export markets.



U.S. AGRICULTURAL EXPORT

Total exports in 2002 were \$53.5 billion

SURPLUS

Fiscal 2001 – \$13.7 Billion

Fiscal 2002 – \$12.3 Billion

Ag is the only export sector which produces a surplus.



REDUCTION IN EXPORT SURPLUS

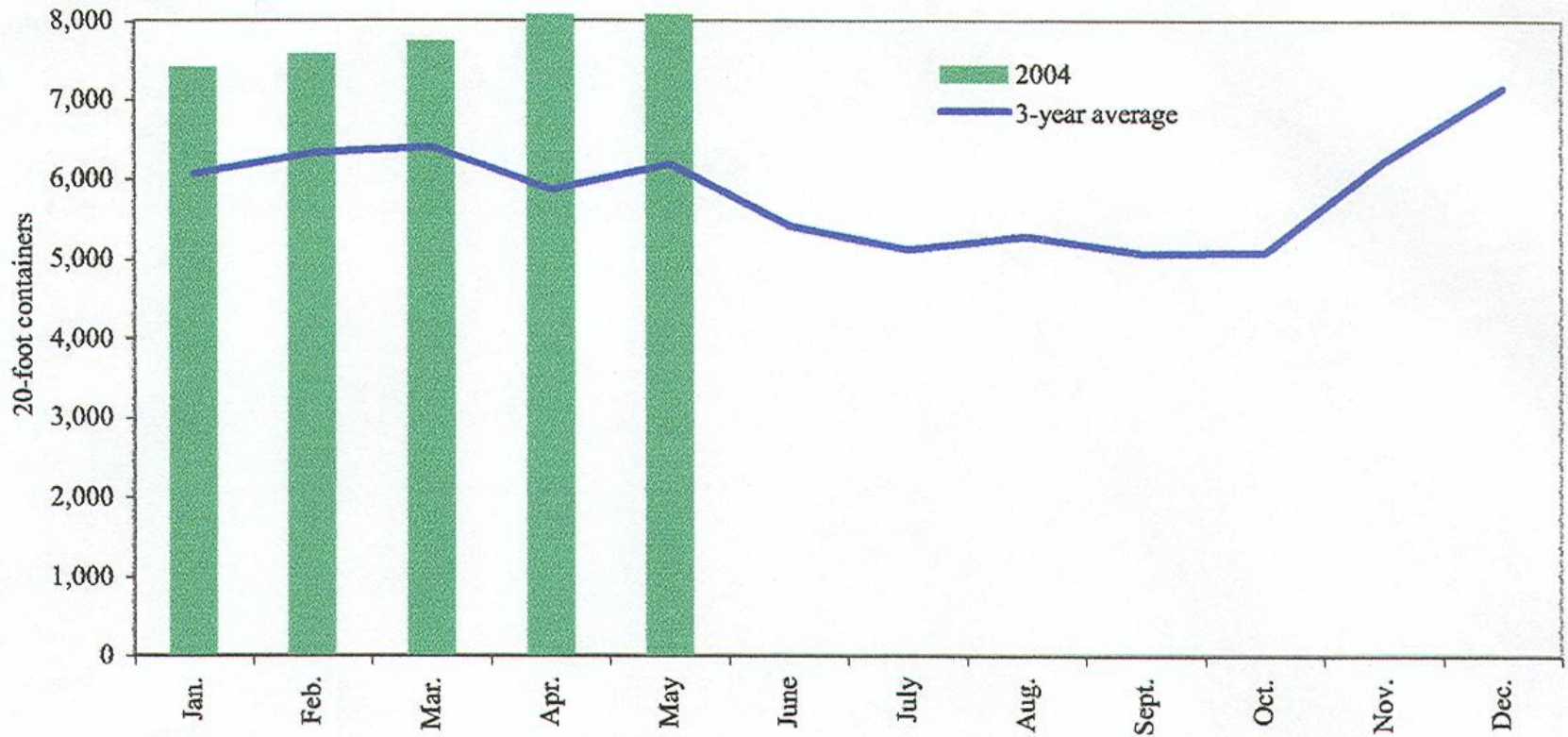
- 10% or \$1.4 billion reduction represents U.S. farmer market share loss to South America
- Loss is directly attributed to our failure to invest in our transportation infrastructure to remain competitive

PROPOSED LOCK AND DAM EFFICIENCY IMPROVEMENT

- Inland Waterways trust fund (fuel tax of \$.24/gal.) would pay 50% of cost.
- Comparatively, State of Wisconsin DOT invested \$1.1 billion on state highway rehab and maintenance in 2002
- WHY IS THIS L&D IMPROVEMENT NOT UNDERWAY?



Monthly shipments of containerized grain for 2004 compared with a 3-year average



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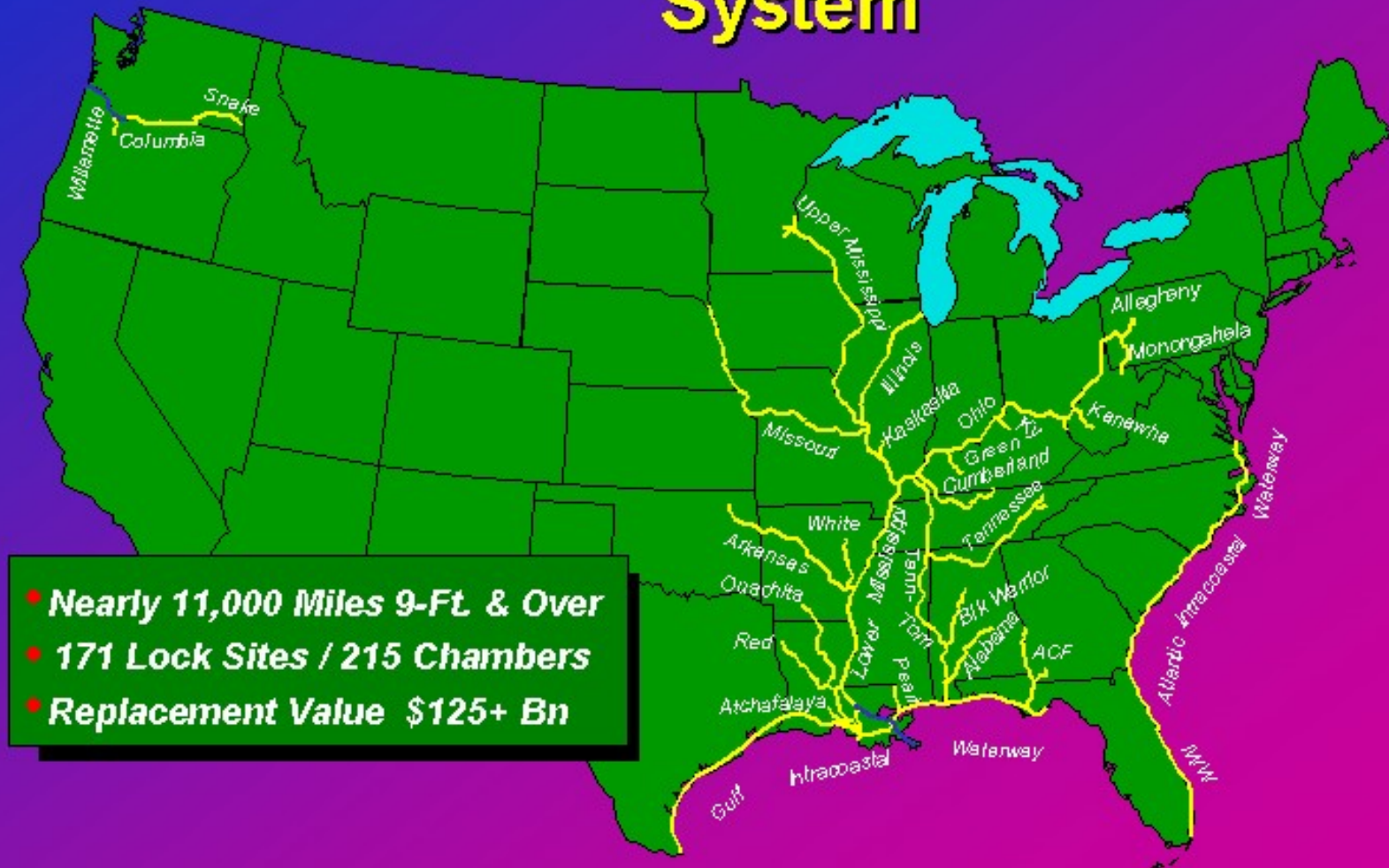
FUEL TAX TRUST FUND

- \$.24/gal Fuel Tax Paid to Trust Fund -UMR accounts for 40% of total contributions.
- \$.04 of tax dollars are applied to the general fund.
- Trust fund dollars are used for 50% cost share of all new and rehabilitation projects.

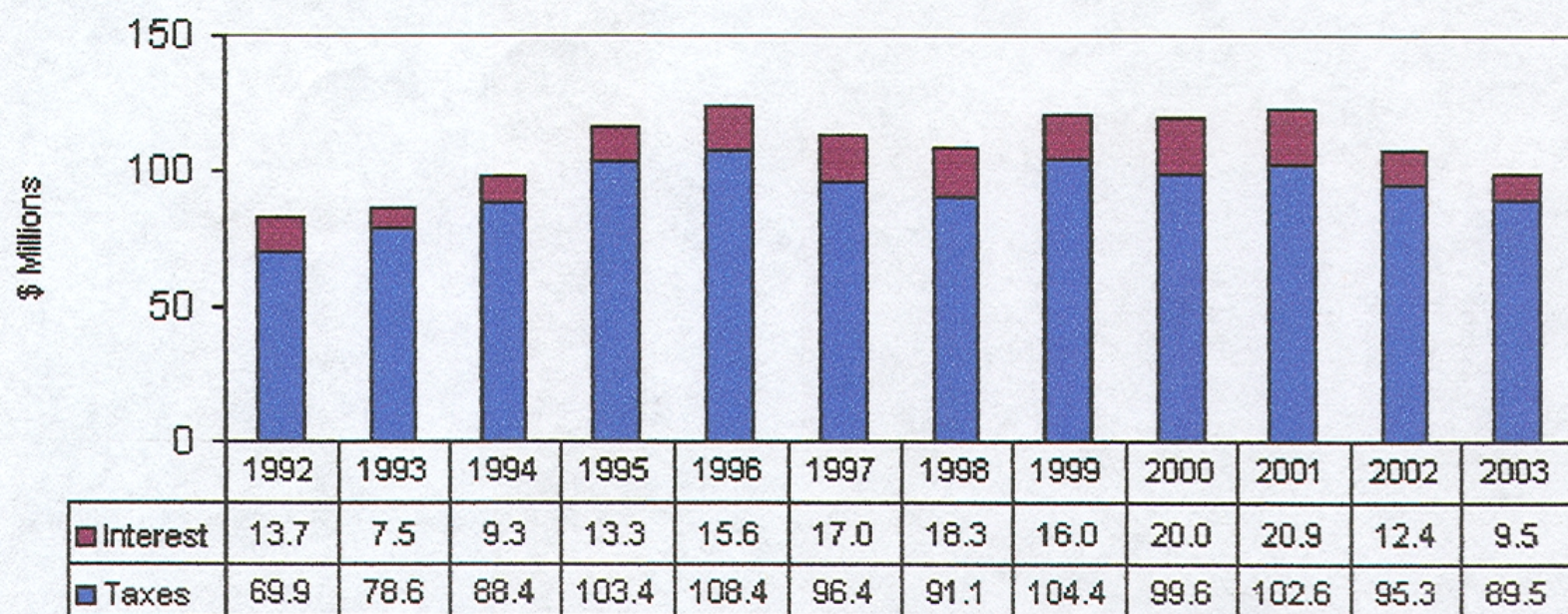
The UMR has received back only 15% of total dollars



U.S. Fuel-Taxed Waterway System



Inland Waterways Trust Fund Receipts 1992-2003



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Brennan's Participation Environmental Management Programs Upper Mississippi River

- Bertom – McCartney Lakes
- Bussey Lake
- Pool 8 – Stoddard
- Potters Marsh
- Trempealeau National Wildlife Refuge
- Wilds Bend (Current)

Bertom & McCartney Lake

Project Type:	EMP (Environmental Management Project)
Project Location:	Mississippi River, Cassville, Wisconsin
Material Dredged:	Silt and Sand
Quantity:	400,000 cubic yards
Pipeline Length:	10,000 lineal feet

Bertom McCartney Lake - (EMP)



Potters Marsh

Project Type:	EMP (Environmental Management Project)
Project Location:	Mississippi River, Thompson, Illinois
Material Dredged:	Silt and Sand
Quantity:	600,000 cubic yards
Pipeline Length:	13,000 lineal feet

Potters Marsh - (EMP)





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Trempealeau National Wildlife Refuge

Project Type:	EMP (Environmental Management Project)
Project Location:	Trempealeau National Wildlife Refuge, Trempealeau, WI.
Material Dredged:	Sand
Quantity:	260,000 cubic yards
Pipeline Length:	8,000 lineal feet

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Trempealeau National Wildlife Refuge - (EMP) - Dike





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Pool #8 Island Reconstruction

Project Type:	EMP (Environmental Management Project)
Project Location:	Mississippi River, Stoddard, WI
Material Dredged:	Silt and Sand
Quantity:	200,000 cubic yards
Pipeline Length:	4,500 lineal feet

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Pool 8 Island Reconstruction













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