

Missouri River - "A Study is Underway....."

Mid-America Freight Coalition
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FREIGHT
Development

*Missouri's
Economy in
Motion*

MoDOT's Role in Freight, Waterways and Economic Development



FREIGHT *Development*

*Missouri's
Economy in
Motion*

- ◆ STIP returns – 3.31:1
- ◆ Port investments
- ◆ 70% of Missouri's economy w/in 30 minute drive of rivers
- ◆ 36% of all jobs and 24% of employers





- 4th most diverse economy
- Second and Third largest rail hubs
- Third largest inland port
- KCI and China hub
- 7th largest highway system, DTL on I70



OPINION

SUNDAY, OCTOBER 22, 2006



COMMENTARY

JEFFERSON CITY, MO
News  Tribune

Diagram of Mississippi River Flow During Drought

6 large dams
allow flow
regulation of
Missouri River

Kansas
City

In drought, the
Missouri River
provides up to 2/3 of
the flow through the
“bottleneck reach”

Minneapolis-St
Paul

27 Locks and
Dams create
“pooled reach”
for navigation

St
Louis

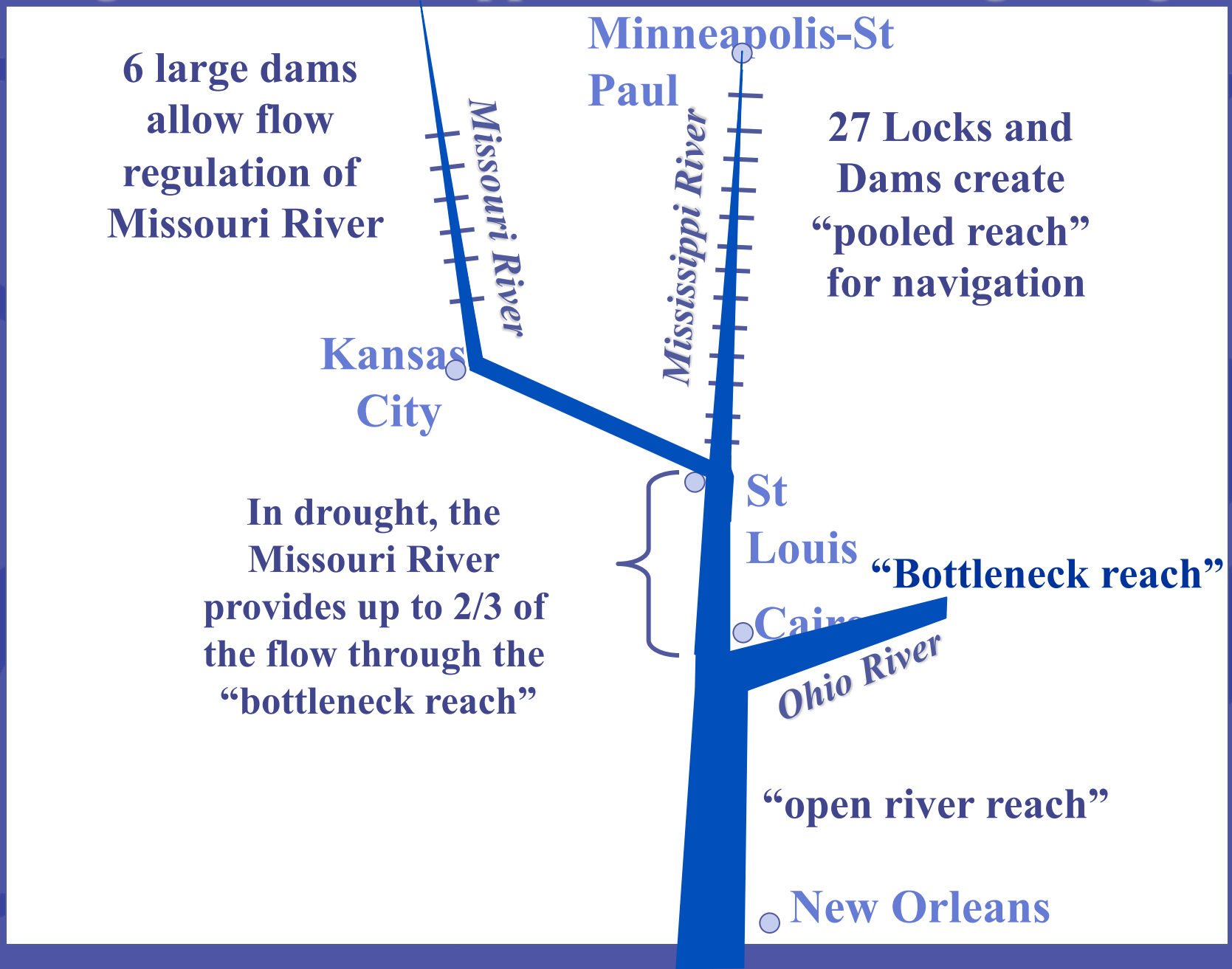
“Bottleneck reach”

Cairo

Ohio River

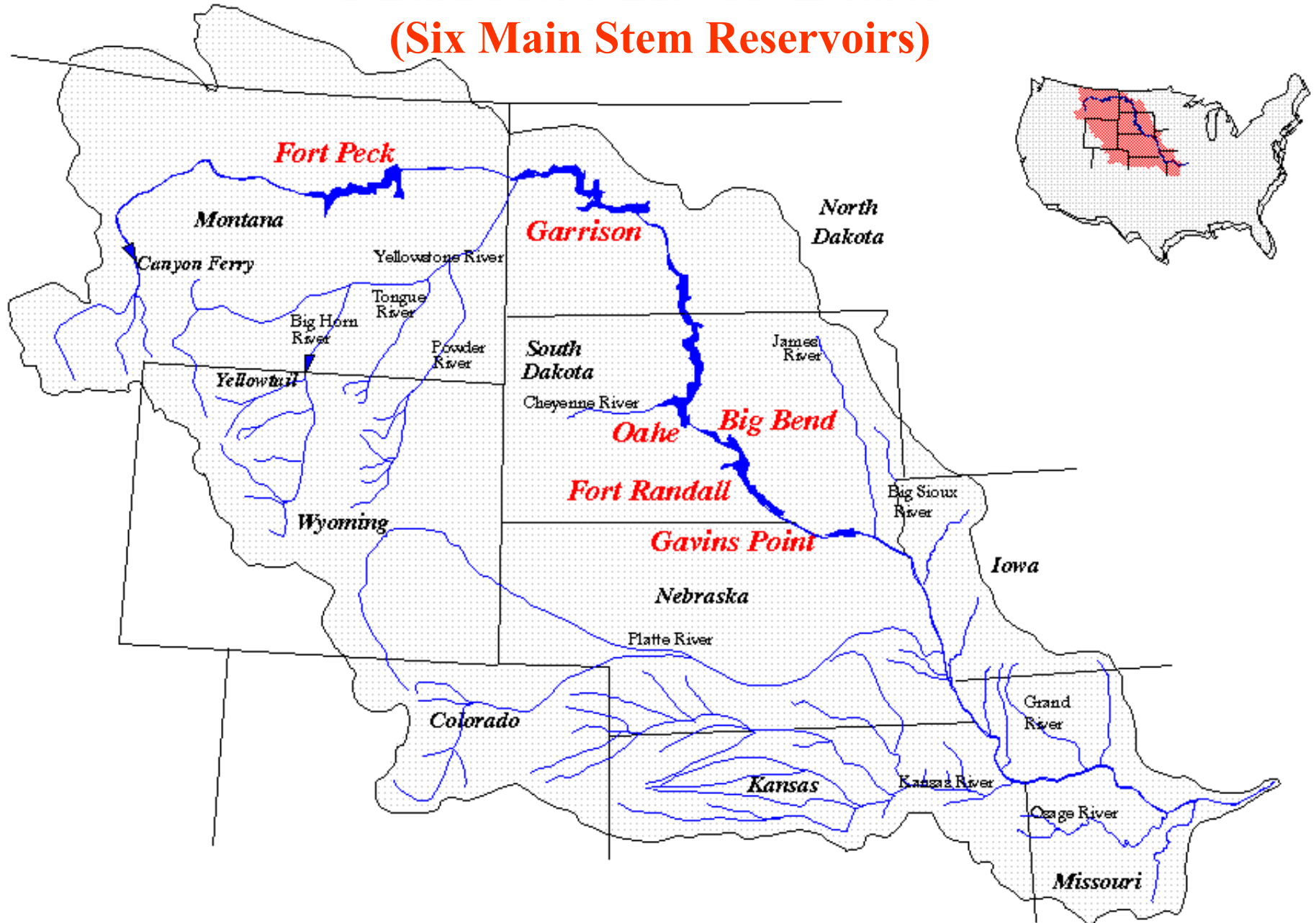
“open river reach”

New Orleans



Missouri River Basin

(Six Main Stem Reservoirs)



Missouri River Provides Many Benefits



Recreation



Power Generation



Flood Reduction



Fish & Wildlife



**Water Supply,
Quality**



Commerce / Transportation



**Agriculture,
Irrigation**

Missouri River Studied to Death? 1967, 1989-2004, 2009-2014...

- ✓ Master Manual
- ✓ MRERP
- ✓ MRRIC
- ✓ MRAPS
- ✓ NAS Sedimentation
- ✓ Bed Degradation Recon
- ✓ Yellowstone Intake and EIS
- ✓ Dredging Permit EIS
- ✓ L/C Lake Deposition Study
- ✓ Fort Peck Outfall
- ✓ Missouri River Corridor Assessment and Development

CERC USGS – Columbia, MO Study Areas

- Invasive Asian Carp Research Program
- Benthic Macro Invertebrate research
- Comprehensive Pallid Sturgeon Research
- Ecosystem, Population and Behavior Monitoring
- Fort Peck Pallid Research Program
- River-Corridor Habitat Dynamics Research



Biological –Ecological Studies from just one group

1. Assessment of Side channel chutes, Lower Missouri River
2. Repellant and Attractant Pheromones to Control Invasive Bighead and Silver Carp
3. Natural and Semi-Natural Vegetation Communities at Big Muddy NFW Refuge
4. Community Characteristics of Benthic Invertebrates
5. Development of Methods to Determine Reproductive Status of Pallid Sturgeon
6. Ecological Impacts of Non-Native Asian Carp in Lower Mo River
7. Factors affecting Reproduction, Movements, and Habitat use of Pallad Sturgeon
8. Individual Based, Spatially-Explicit Modeling of Fish Populations
9. Modified Discharge and Water Temperature on Pallid Sturgeon and Other Native Fishes
10. Missouri River Benthic Fish
11. River Corridor Habitat Dynamics

The Big Three – right now....

- Missouri River Freight Corridor Assessment and Development Plan- MoDOT
- MRAPS - USACE
- Section 108 Study- MARAD, USDOT



As Many Similarities as Differences....



We do use bigger boats....



Waterways - Missouri River Development Plan

➤ Identified Issues

- Water levels, reliability and maintenance
- Lack of markets
- Lack of market coordination
- Critical mass



The Missouri River Freight Corridor Development Forum

- ✓ Agency Perspectives
- ✓ Industry Perspectives
- ✓ Group discussions
- ✓ Agreement to go forward as a group
- ✓ River is a transportation and economic development asset



Missouri River Development Plan

- ✓ Traditional Markets and Commodities
- ✓ New Commodities and Markets
- ✓ Operation Issues
 - Infrastructure, operations and equipment
 - River management



Based on Continuous work and Communication with Industry

Project Update – What's been done?

➤ Completed Tasks

- Inventory Report
- Stakeholder Input
- Market Analysis
- Preliminary Concepts of Operation

➤ Current Work

- Stakeholder Input
- Research Findings Forum

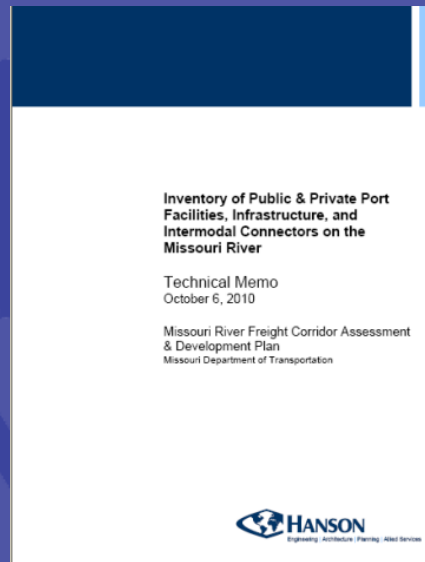
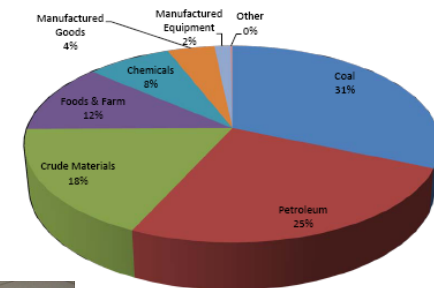


Figure 11: 2008 Intercoastal Waterway Volumes by Commodity Share



Preliminary Concepts of Operations



- Low Water Flow Response
- Freight Shift & Recovery of Traditional Markets
- Emerging Markets & New Business Concepts
- Infrastructure & Required Terminal Capabilities
- Economic Development, Sustainability & Site Selection Factors

What's next?

- Remaining Tasks
- Research Findings Forum
 - Thursday, April 28th
 - 9:00 AM – 2:30 PM
 - Rocheport , MO



Status of River Development



- ✓ Tonnage up 24%
- ✓ Extended seasons
- ✓ Increased Awareness
- ✓ Industry Participation

Development and Implementation



- Driven by industry
- Data + industry + best practices =
- Concept of Operations
- Project Coordination Team



Imperative that we redevelop corridor!

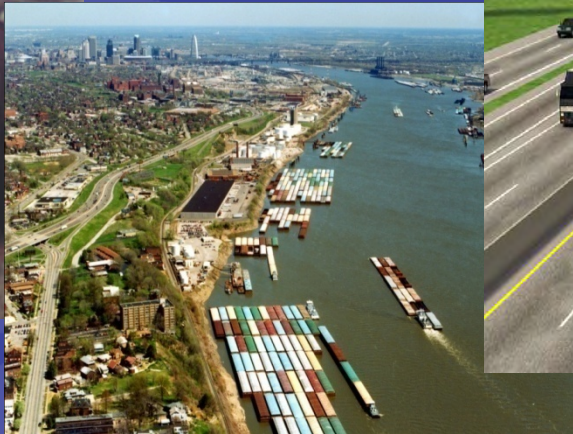
Resources

- ◆ Freight Web page - <http://www.modot.mo.gov/othertransportation/freight/index.htm>
- ◆ Innovation Library - <http://www.modot.mo.gov/services/OR/byDate.htm>



And DON'T FORGET!

- ◆ AASHTO/FHWA Freight Partnership Meeting IV in KC!
- ◆ August 2-5, 2011
- ◆ Intercontinental Hotel





Thank You!

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