

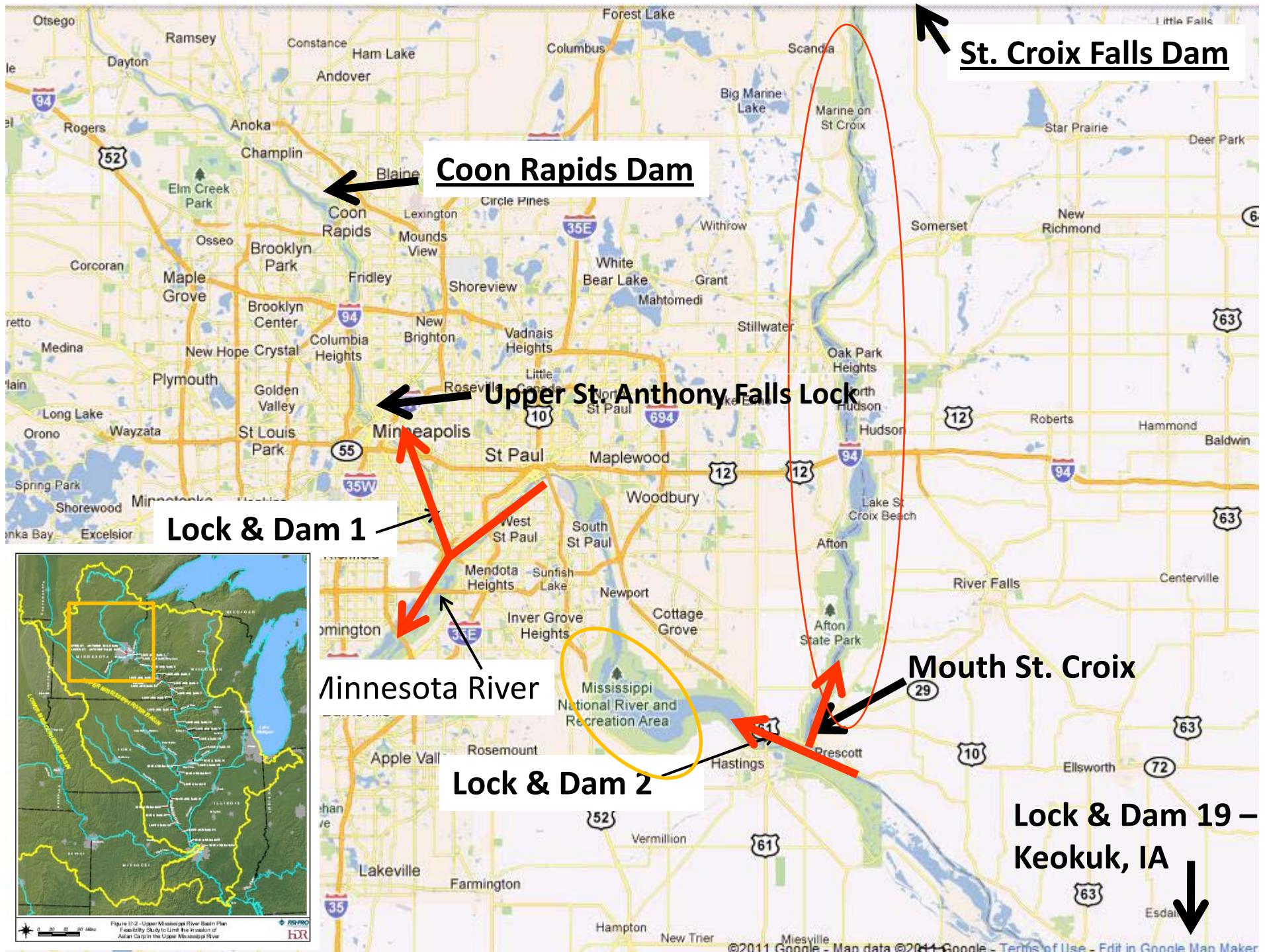
# Asian Carp in Minnesota

Peter Sorensen, University of Minnesota  
Tim Schlagenhaft & Jay Rendall, MN DNR  
John Afinson, National Park Service

*December 13, 2011*  
*MRBP*

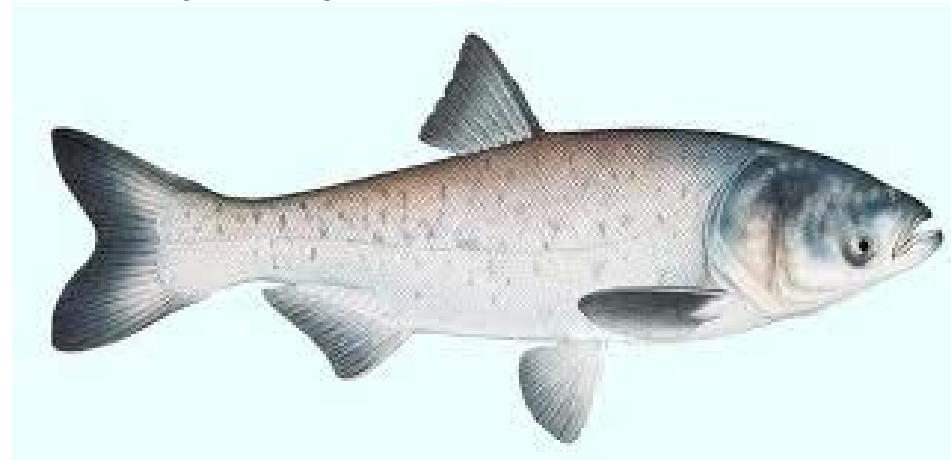
# Outline

- The area
- History of Asian carp in our area
- ad hoc Asian Task Force
- Actions
- Other groups
- Summary



# 1996

- The start
- A Bighead carp captured in St. Croix River



# 2003

- 23 lb Bighead in Lake Pepin (downstream MSP)



# March 2004

## Feasibility Study to Limit the Invasion of Asian Carp into the Upper Mississippi River Basin (Final Report – March 15, 2004)



- Comprehensive, integrated approach
- Series of acoustic barriers at locks (#11 in IA?)
- NOT FUNDED



Figure 10-2. Acoustic System and Multi-Channel Beam Field (courtesy of Foss L.L.C.)



Figure 10-3. Bio-Abundant Fish Fence System  
(courtesy of Fish Guidance Systems, Ltd.)

# 2007

## MN State Plan

### **Preventing the introduction of Asian carp into Minnesota (MN DNR)**

*Based on national plan*

1. Prevent spread of wild Asian carp:
  - **Acoustic barrier at Lock&Dam 11, St Croix River.**
2. Prevent spread of wild baitfish
  - continue ban, new education
3. Ban importation of live Asian carp
  - continue ban, inform fish importers
4. Monitor importation of farm-raised fish
  - random inspections
5. Ban introductions by individuals
  - continue ban, education

# Sept. 2007

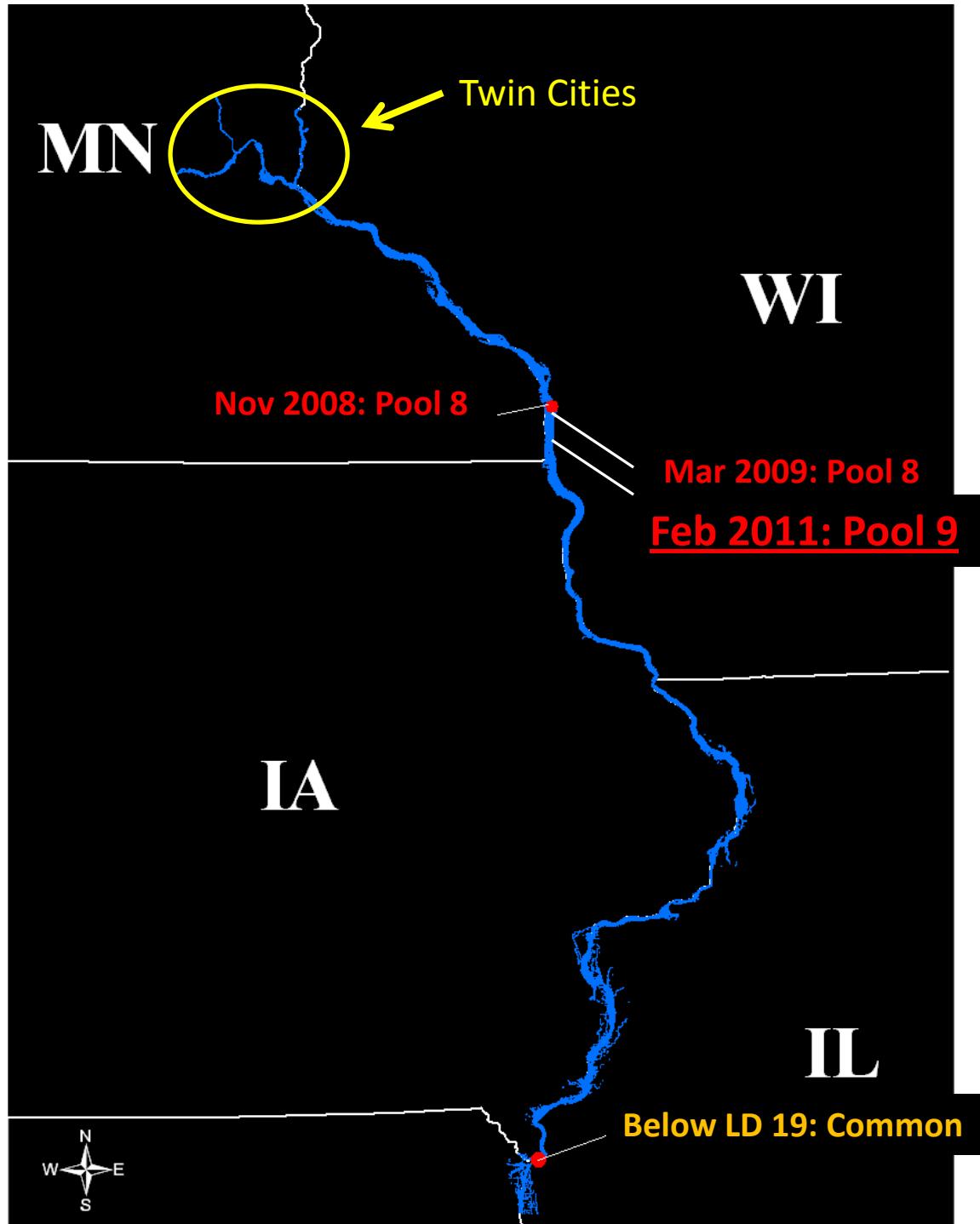
- Another 29 lb Bighead carp in Lake Pepin!



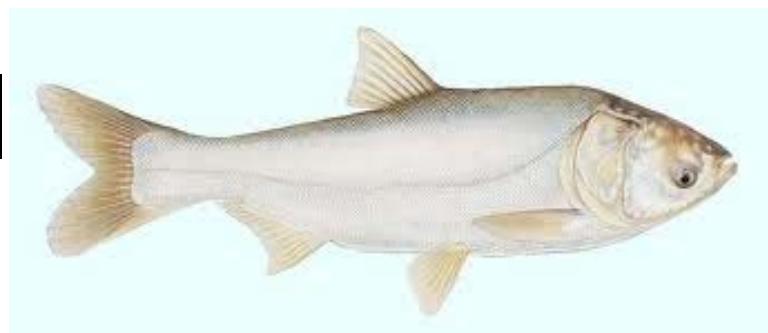
# 2008

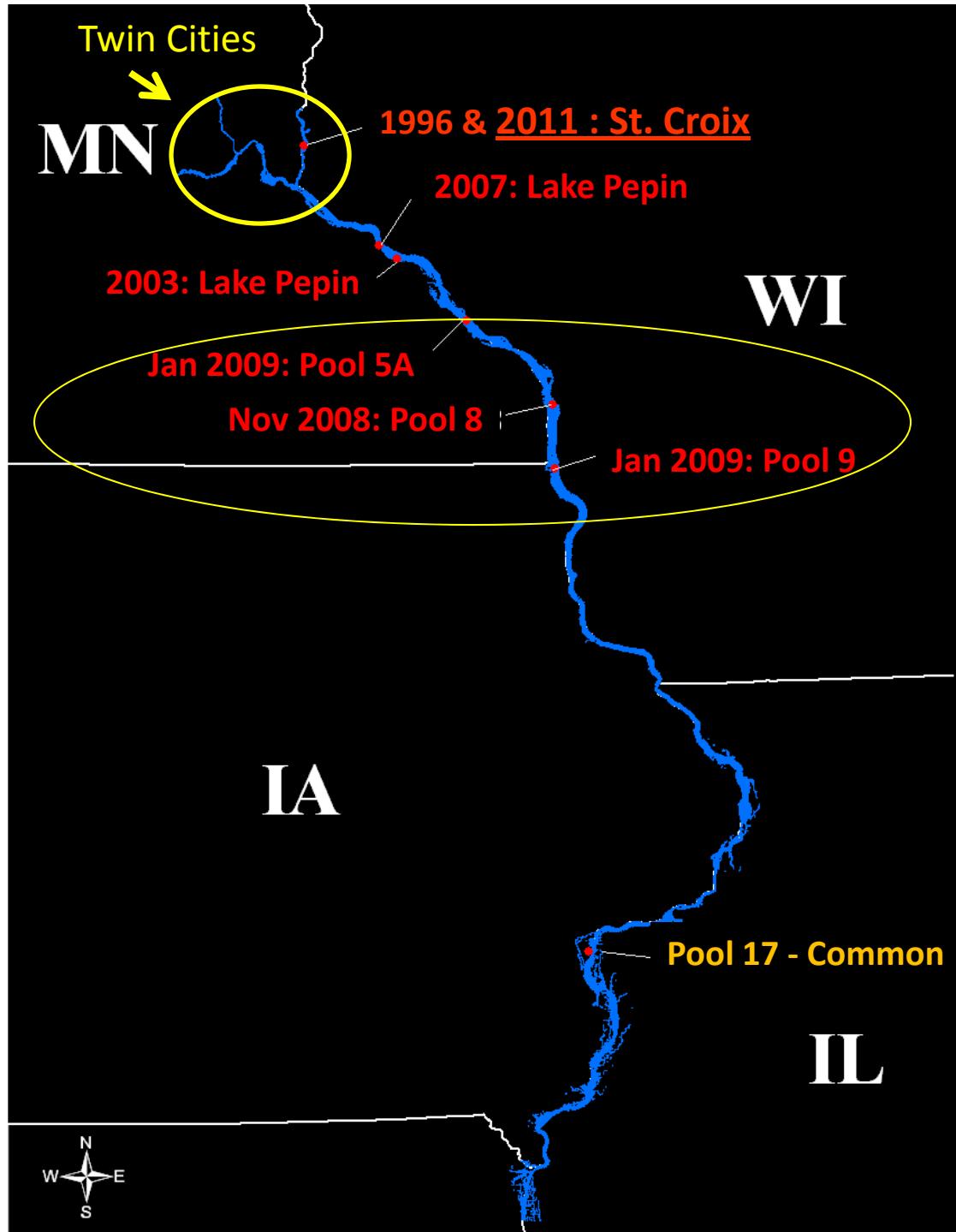
- A Silver carp caught in Pool 8!



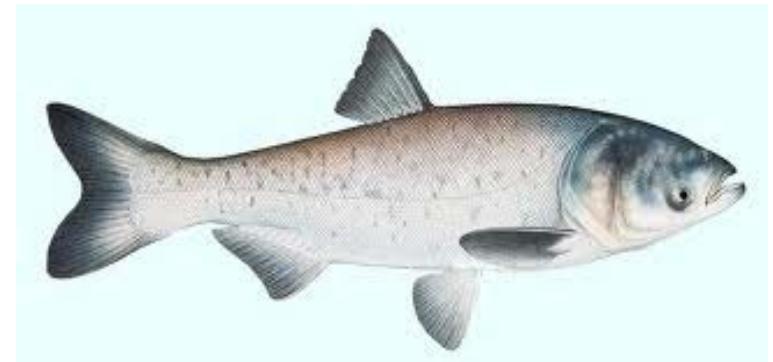


Two more...  
Both in Miss river!  
n=3





5 more Bigheads!  
1 in St Croix  
n=8



# 2011- January

## 'ad hoc' Asian Carp Task Force

- The start:
  - National Park Service
  - MNRRRA
  - Corps of Engineers
  - Department of Natural Resources
  - U.S. Fish and Wildlife Service
  
- Three Questions:
  - Where are they?
  - How long before they get here?
  - What Is being done?

# 2011- March

## **Ad hoc Asian Carp Task Force Grows**

### Agency or organization representatives

- National Park Service (co-chair)
  - Mississippi National River and Recreation Area
  - St. Croix National Scenic Riverway
- Minnesota Department of Natural Resources (co-chair)
- US Fish and Wildlife Service
- US Geological Survey
- Minnesota Department of Transportation
- Wisconsin Department of Natural Resources
- City of Minneapolis
- City of St. Paul
- City of Hastings
- Prairie Island Indian Community
- Shakopee Mdewakanton Sioux Community
- Three Rivers Park District
- Saint Paul Port Authority

### Technical advisors

- University of Minnesota (Peter Sorensen, Loren Miller)
- US Army Corps of Engineers, St. Paul District
- Mississippi River Fund
- St. Croix Valley Foundation

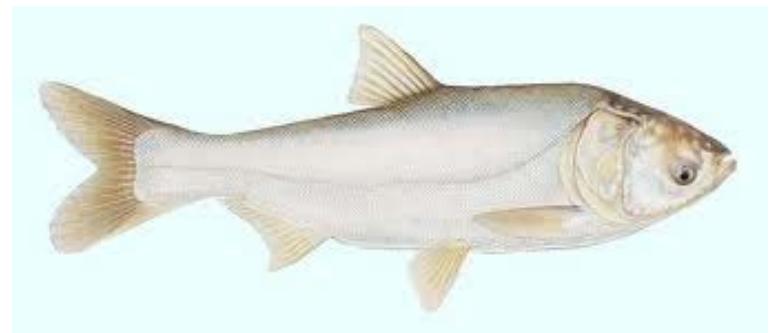
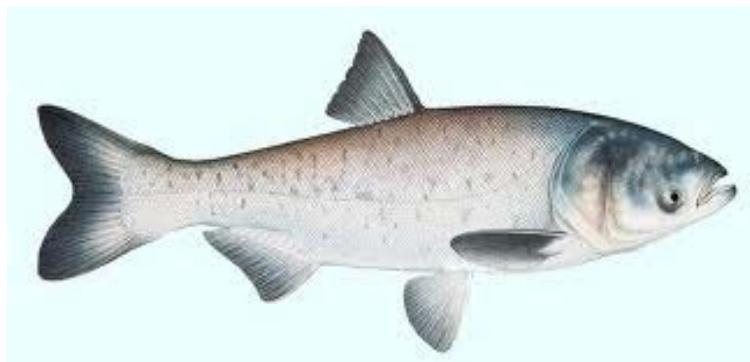
### Observers

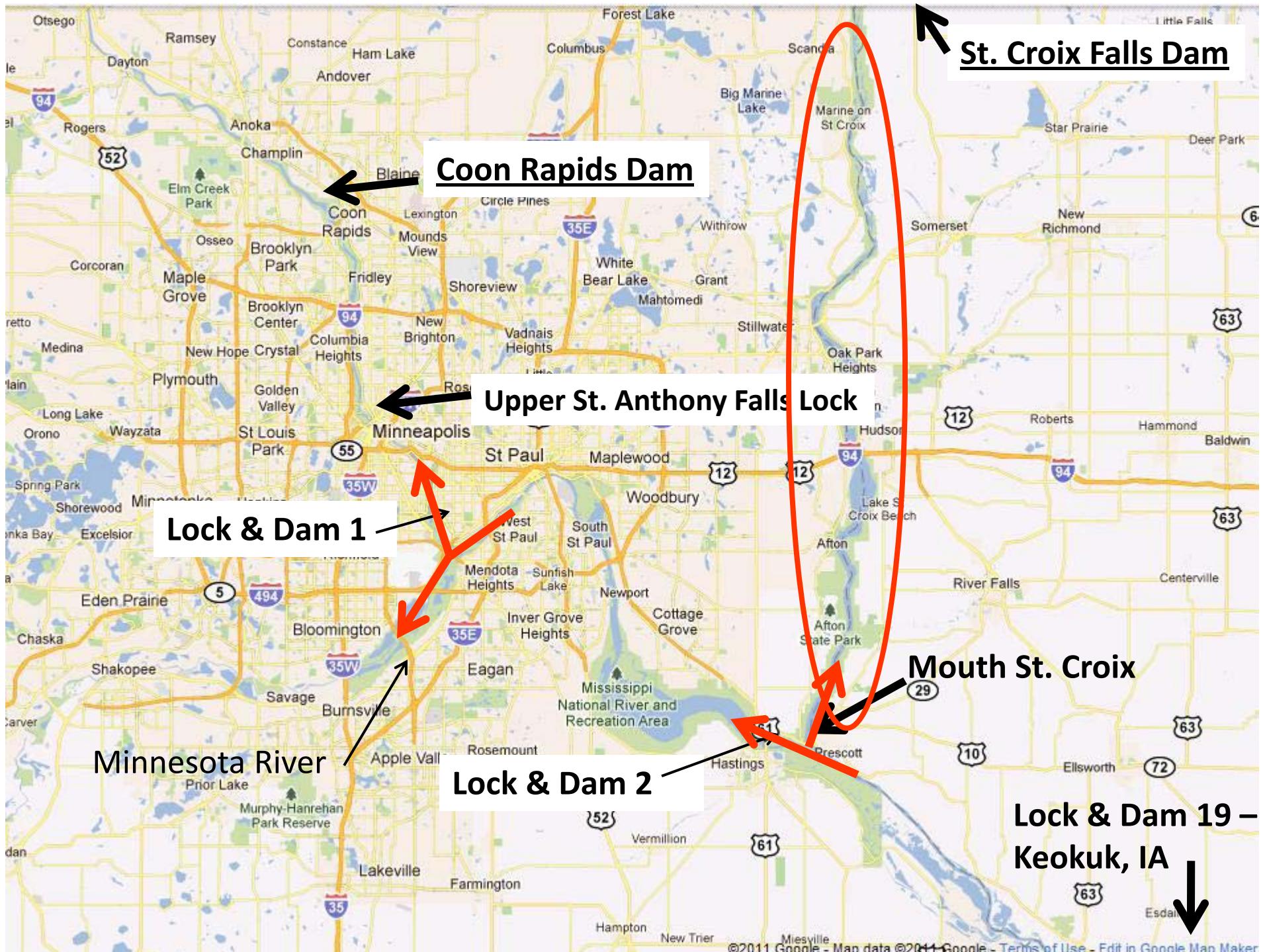
- Friends of the Mississippi
- Upper Mississippi River Waterways Association
- St. Croix River

Association

# Committee Actions

- eDNA surveys with eDNA Solutions
- Commercial fishing
- Develop a Plan





# 2011- July

22/50 eDNA samples positive for Silver carp in  
the St. Croix River

0/50 Bighead, Black, Grass



# 2011- July

Commercial fishermen search river for live fish – none



# 2011- Sept

## ad Hoc Committee

- Additional eDNA Sampling - Sept. 2011

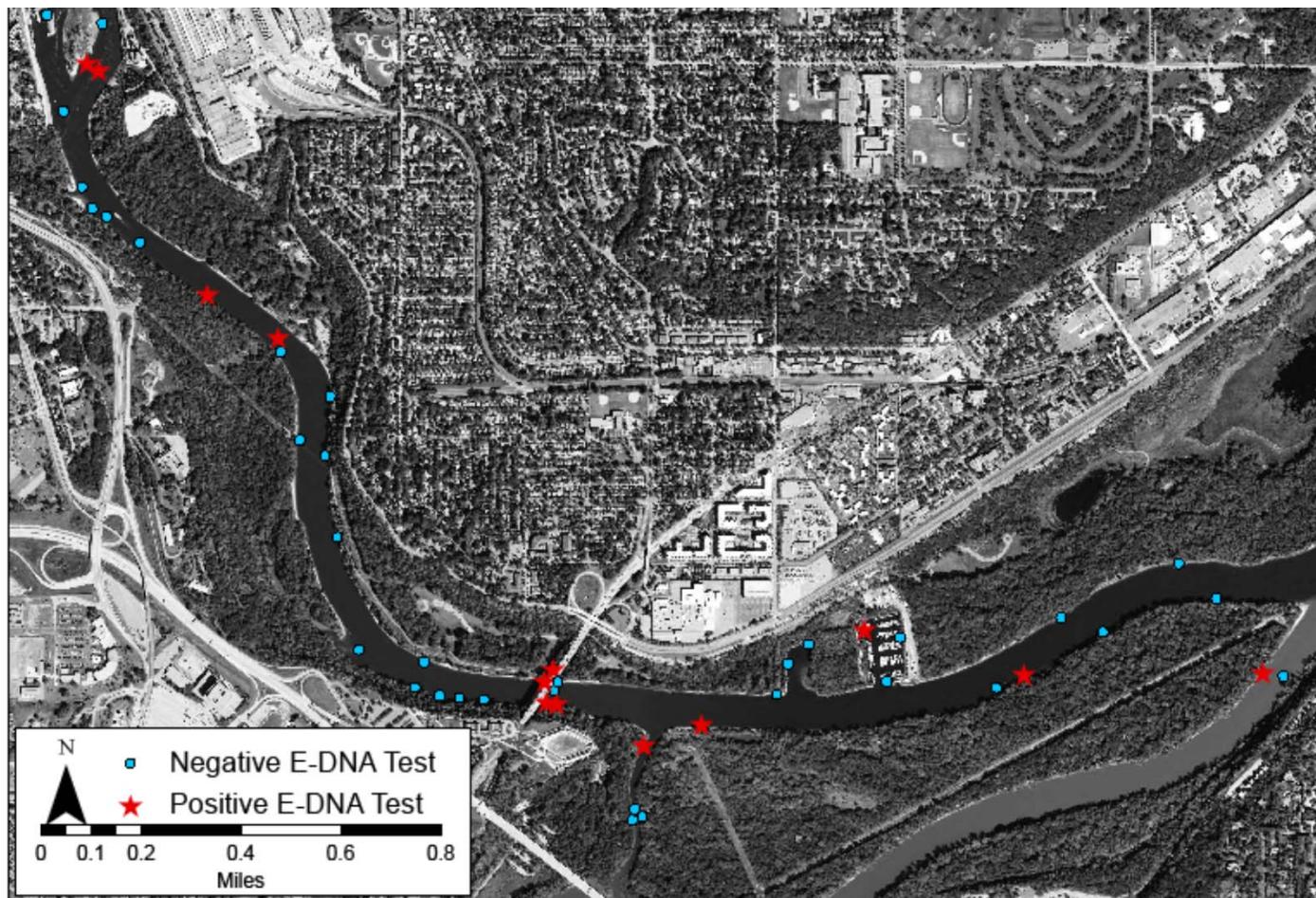
- 30 samples above and 20 below dam at Croix Falls
- 75 samples below Lock and Dam #2 at Hastings, MN
- 50 samples in the Minnesota River
- 50 samples below Lock and Dam #1 (Ford Dam)
- 25 samples above and 25 below the Coon Rapids Dam



# 2011- September

14/ 49 positive for Silver carp around Lock and Dam #1

0/50 for Bighead carp



# 2011- December

3/25 positives above Coon Rapids Dam – silver carp  
11/25 positive below Coon Rapids Dam – silver carp

0/25 - Bighead carp

(other data waiting)



# 2011- December

Ad hoc Asian Carp task force expands?

Plan formalized for governor:

1. Detection

-eDNA, commercial seining, research

2. Prevention and deterrence:

-Fix Coon Rapids dam

-Reduce Lock&Dam usage

-Acoustic barriers

St Croix?

lock and dams.

-Research

3. Mitigation and control

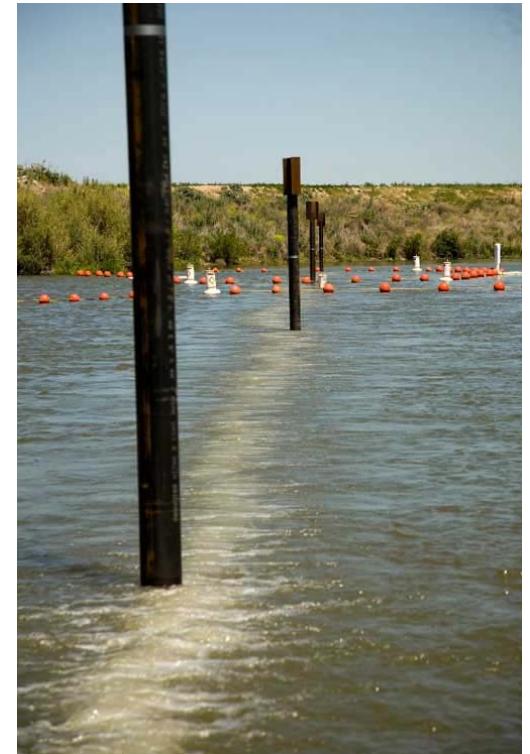
-Removal

-Research

4. Communication and outreach

- Websites

- Network



# Other Politics

1. ‘Ad hoc Asian carp task force/ Forum’
2. MN DNR
3. NGO Group
4. Legislature (Lessard-Sams, LCCMR)
5. Governor

# Minnesota DNR

- 1. Close locks:** Only 100% effective way to prevent fish from swimming upstream into Upper Miss River, Mille Lacs and other premier fisheries resources
2. Feasibility study highest priority
3. Criteria to trigger emergency lock closure clearly defined:
  - Collection of live adult or juvenile fish
  - eDNA evidence

# **National Wildlife Federation Coalition**

## **-Letter to governor, Immediate action, Shut locks**

- Izaak Walton League
- Clean Water Action
- Becker County Coalition of Lake Associations
- Audubon Society
- Friends of the Mississippi River
- National Wildlife Federation
- Minnesota Conservation Federation
- MN Center for Environmental Advocacy
- Minnesota Waters
- Minnesota Seasonal Recreational Property Owners
- And others

# NGO Coalition Letter to Governor Dayton, Nov. 18, 2011

- 12 NGOs
- We believe the **goal** of your administration should be:
  - **To prevent the introduction and spread of Asian carp in Minnesota waters.**
- The following three *objectives* should accompany these goals in priority order:
  - *Prevent the spread of Asian carp above the Ford Dam (Lock #1);*
  - *Significantly reduce the risk of Asian carp passage above Lock #19 (Keokuk, IA); and*
  - *Monitor and control carp populations if established between Lock #19 and Lock #1*

# **Legislature: Lessard-Sams Council**

- \$18,000,000 to refurbish Coon Rapids dam
- \$3,000,000 for a new acoustic barrier dependent upon matching funds from Wisconsin and Federal Government
- Other?

# Governor Dayton's Action Plan

- Support cooperative approach
- Recognize urgent issues requiring immediate action
- Formally charter multi-organizational task force
- Support immediate congressional action to give the Corps emergency authority to close USAF lock and Lock and Dam #1 if Asian carp are detected nearby
- Support long-term actions recommended by ad hoc Task Force:
  - enhance info on movements and population size
  - evaluate and if feasible install deterrent barriers
  - accelerate research on long-term controls
  - Improve habitat for native species
- NO FUNDING YET...

# Summary/ Thoughts

- eDNA?
- Acoustic barrier in locks?

