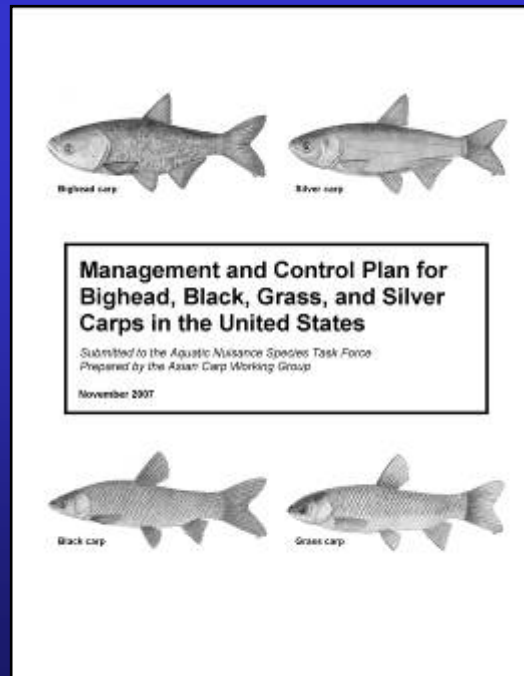


# **Management and Control of Asian Carps**

**Greg Conover**  
**MICRA Coordinator**

# Management and Control Plan

- Asian Carp Working Group
- 48 strategies / 131 recommendations
- Approved by ANSTF – November 2007



# Implementation

- **Oversight Team**
  - **ANSTF requested USFWS lead**
  - **Integrate, prioritize, and sequence all 131 recommendations**
  - **Determine available and necessary resources**
  - **Identify budget needs and develop initiatives**
  - **Develop Operational Guidance and Procedures**
- **What's happened since November 2007?**
  - **Turnover of key personal = little action**
  - **Implementation on agenda for fall ANSTF**

# Goals

## 1. Prevent introductions

- Human mediated activities

## 2. Contain feral populations

- Natural ability to disperse
- Prevent interbasin transfers
- Forecast, detect, and rapid response

## 3. Extirpate or reduce feral populations

- Integrated Pest Management



# Contain Feral Populations

- **Prevent interbasin transfers and limit intrabasin movements**
  - **Barriers – specifically identifies need for redundant barrier systems in Chicago Sanitary and Ship Canal**
  - **Canals, waterways, and water diversions**
    - ◆ **Permanent and temporary connections**
    - ◆ **Des Plaines River and Deep Run Creek**



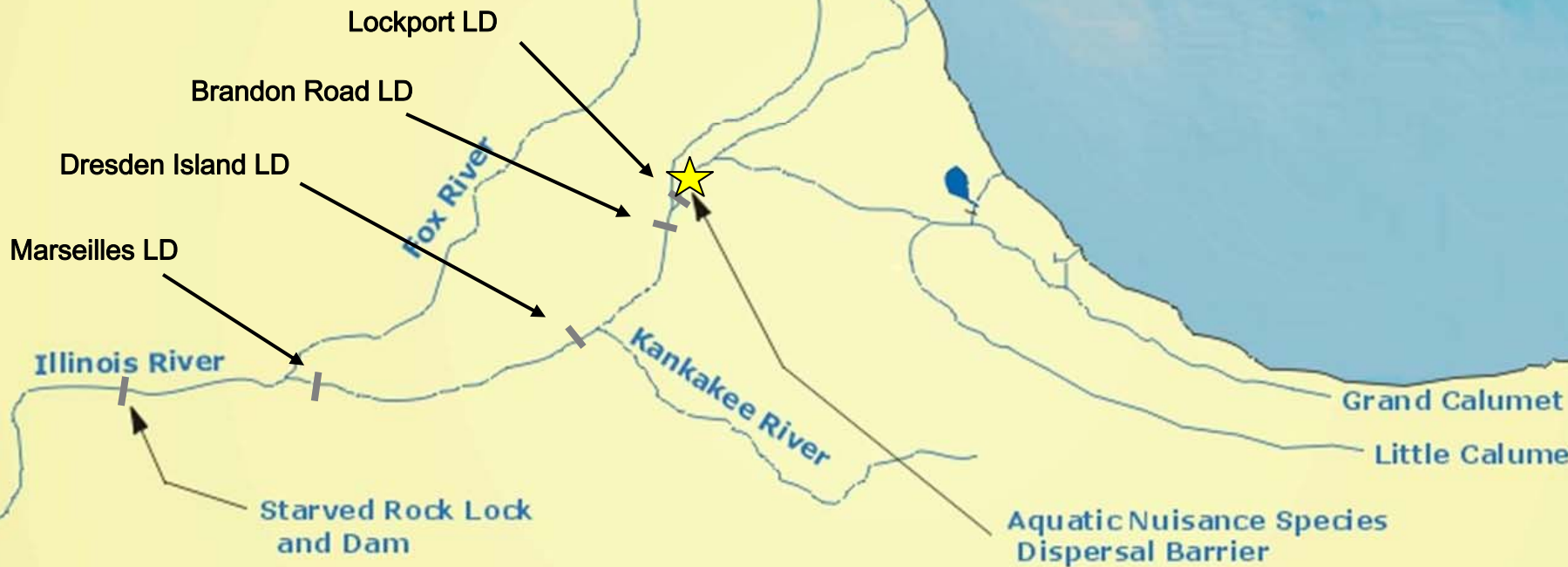
# Surveillance & Detection

- **Forecast, detect, and rapid response**
  - **Early detection monitoring**
  - **Develop rapid response plans**
  - **High risk locations and waters of special concern**
    - ◆ **Chicago Sanitary and Ship Canal**



# Early Detection Monitoring

- Started in 2004
- Multi-agency effort
- May – October
- Multiple pools
- Gill nets and EF

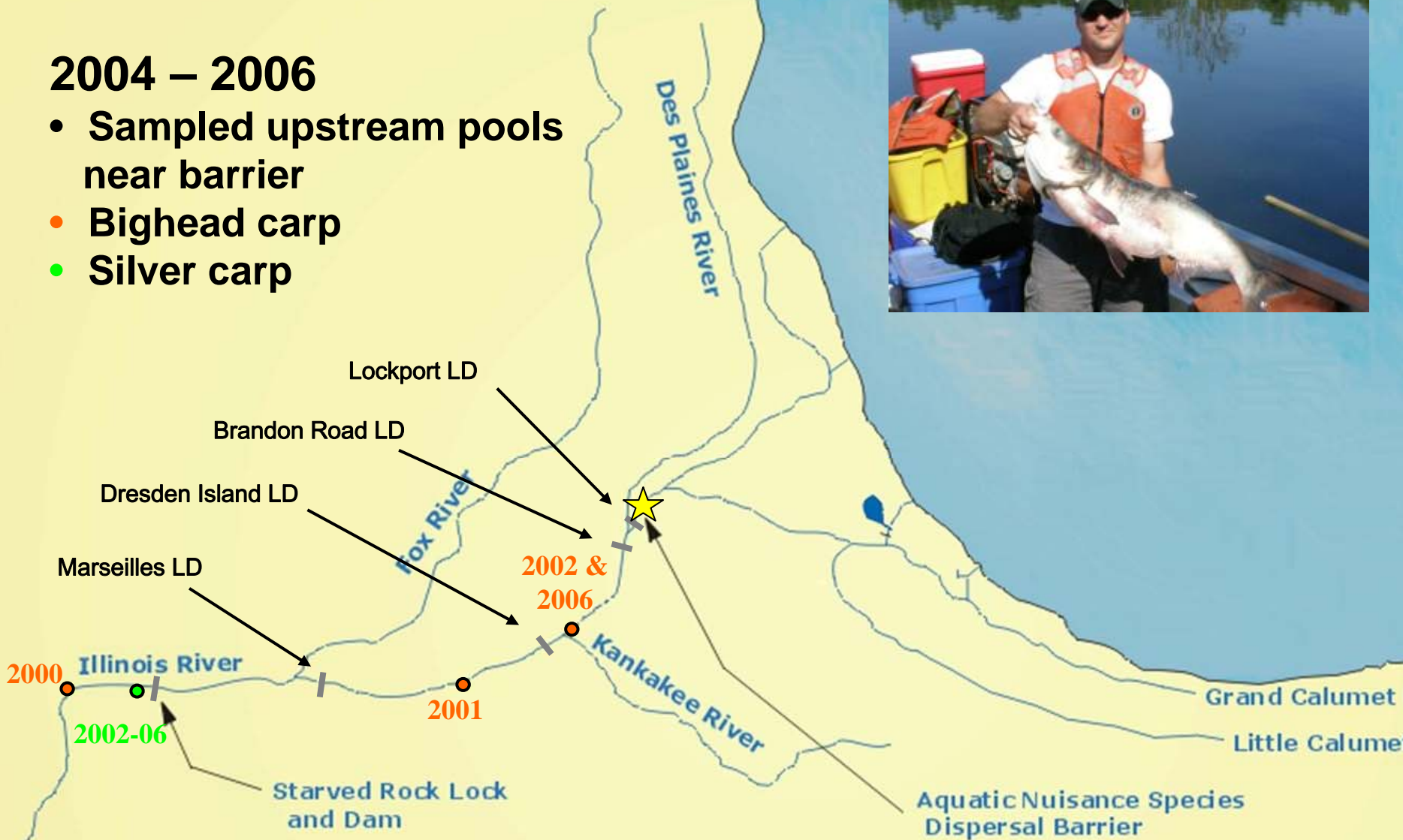


\* USFWS 'Carp Corral' started in 2000

# Early Detection Monitoring

2004 – 2006

- Sampled upstream pools near barrier
- Bighead carp
- Silver carp

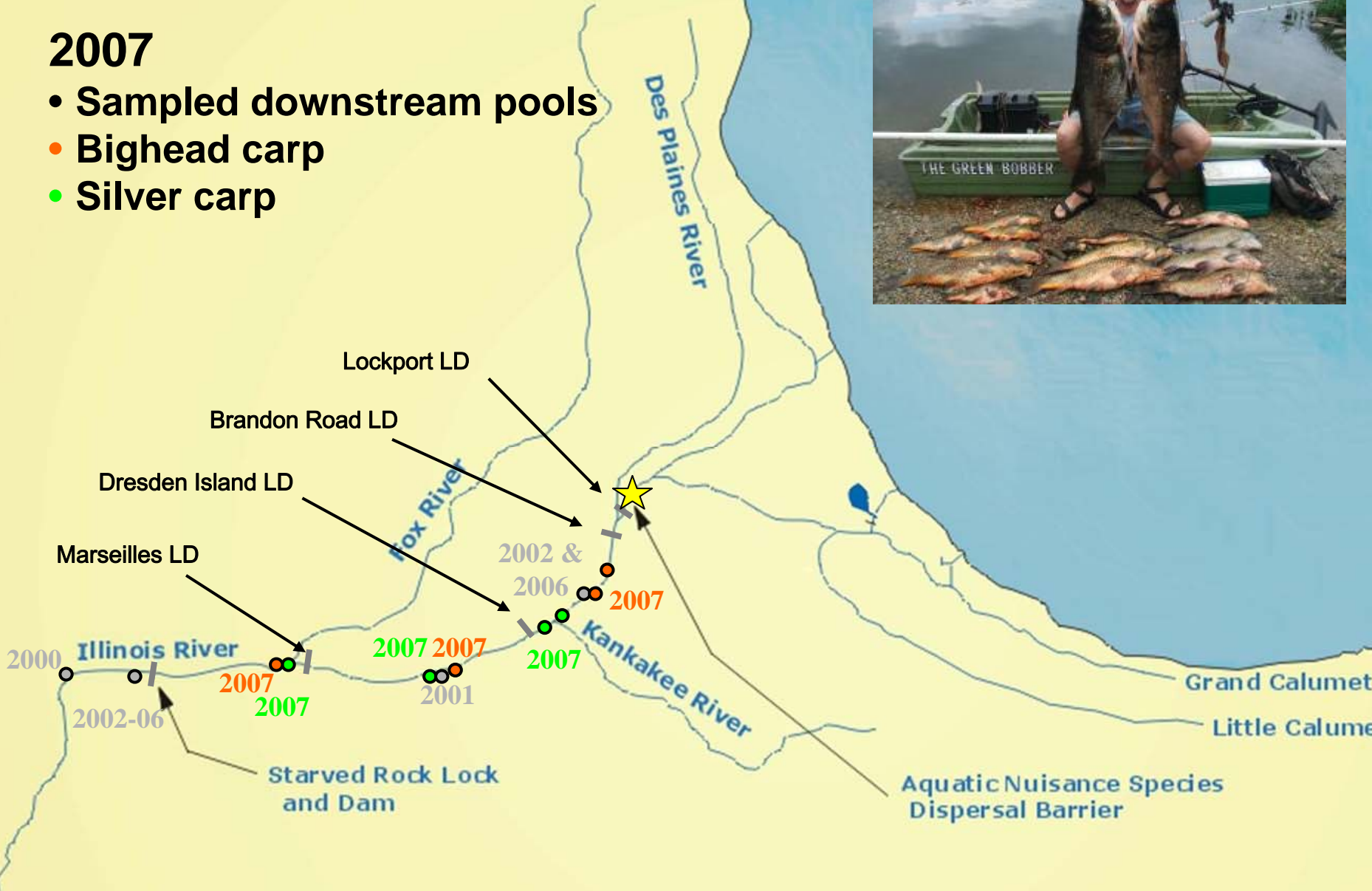


\* Collected during USFWS Carp Corral

# Early Detection Monitoring

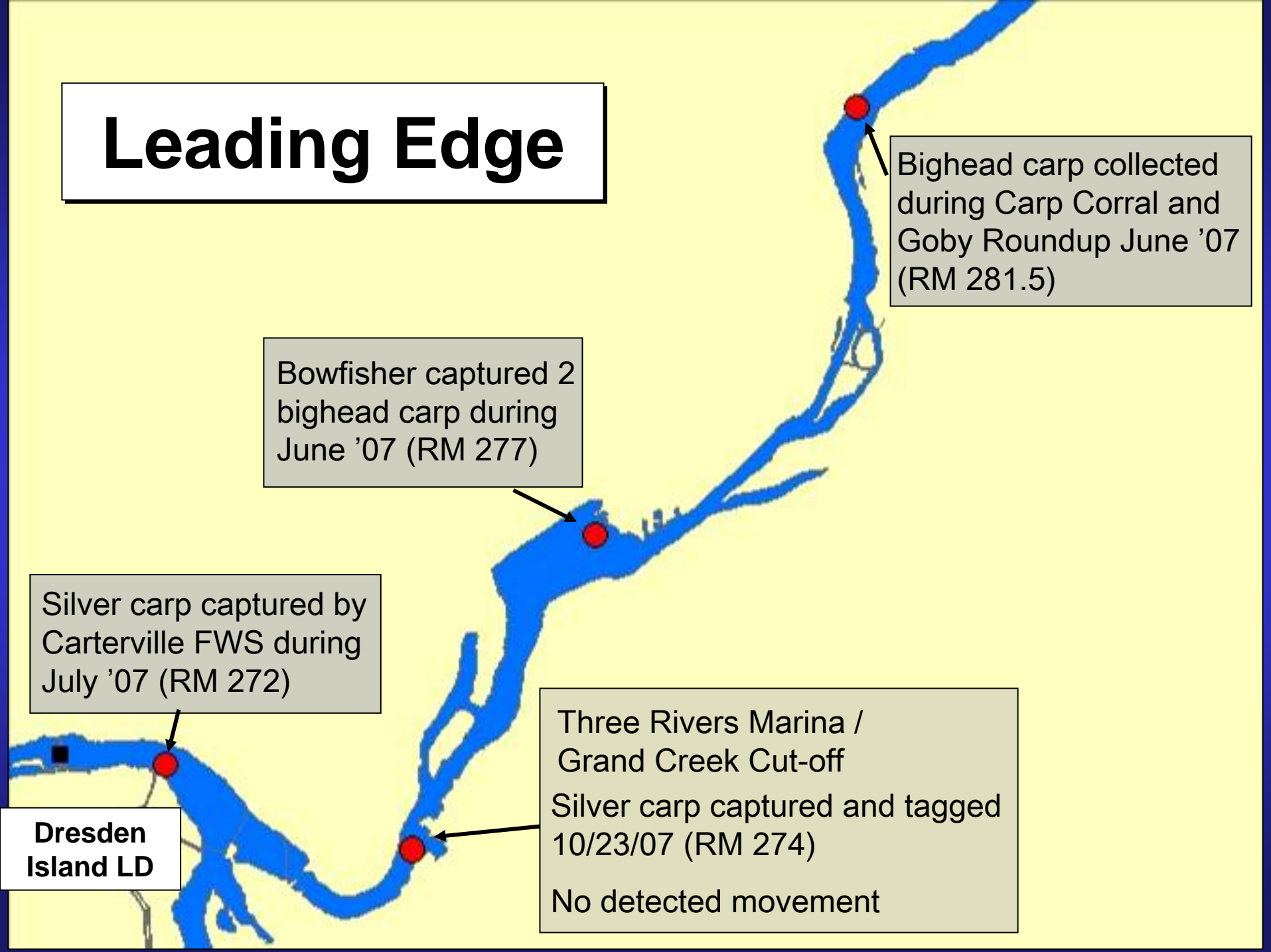
## 2007

- Sampled downstream pools
- Bighead carp
- Silver carp



\* Additional sampling effort conducted in 2007

# Leading Edge



Bighead carp collected during Carp Corral and Goby Roundup June '07 (RM 281.5)

Bowfisher captured 2 bighead carp during June '07 (RM 277)

Silver carp captured by Carterville FWS during July '07 (RM 272)

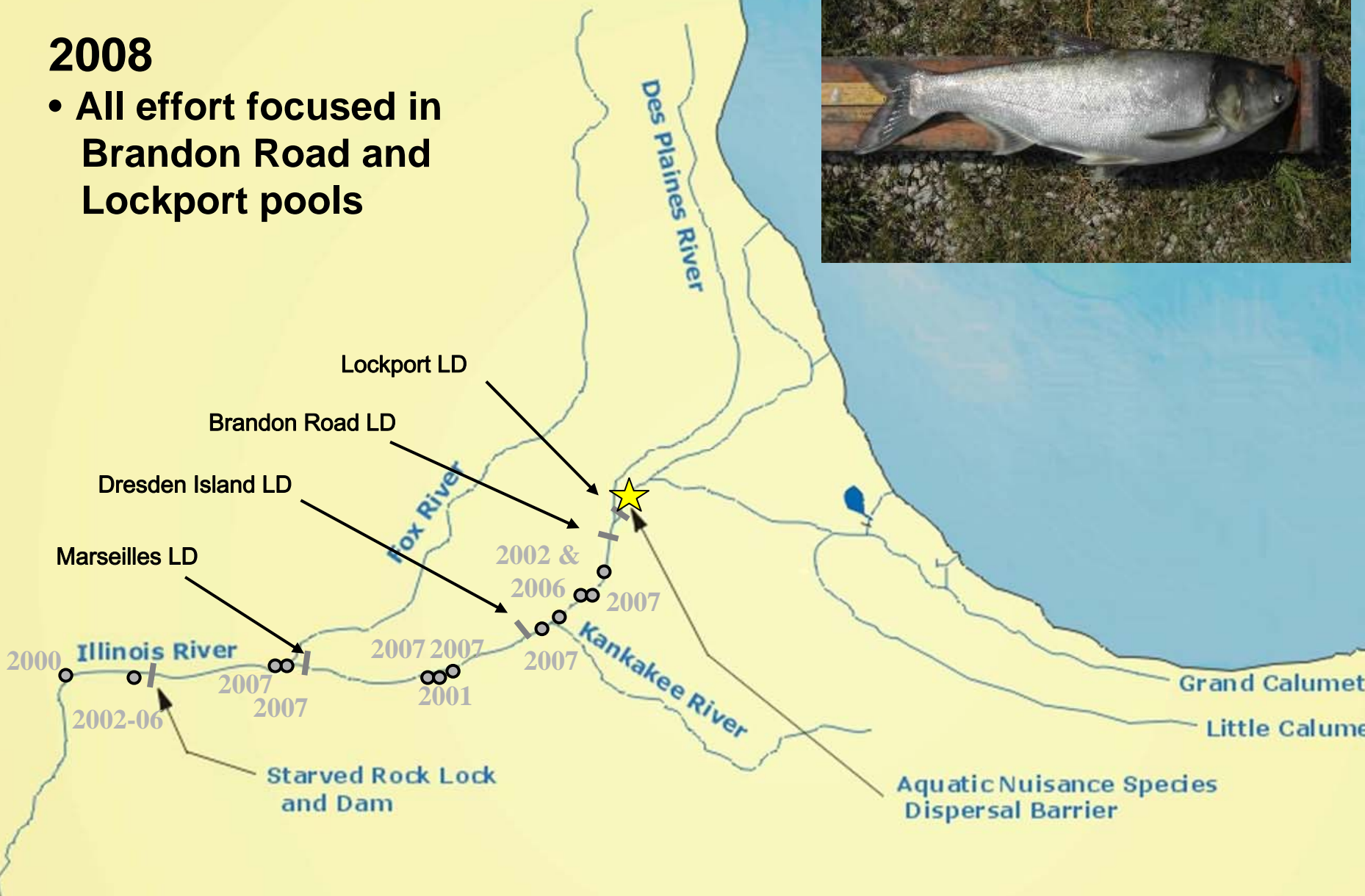
Dresden Island LD

Three Rivers Marina / Grand Creek Cut-off  
Silver carp captured and tagged 10/23/07 (RM 274)  
No detected movement

# Early Detection Monitoring

2008

- All effort focused in Brandon Road and Lockport pools



\* Difficult to collect or detect at low abundance

# Acoustic Network

- 12 stationary receivers
- 60 miles below barrier
- Continuous monitoring

## 38 Asian Carp Tagged 2007

### Starved Rock (26)

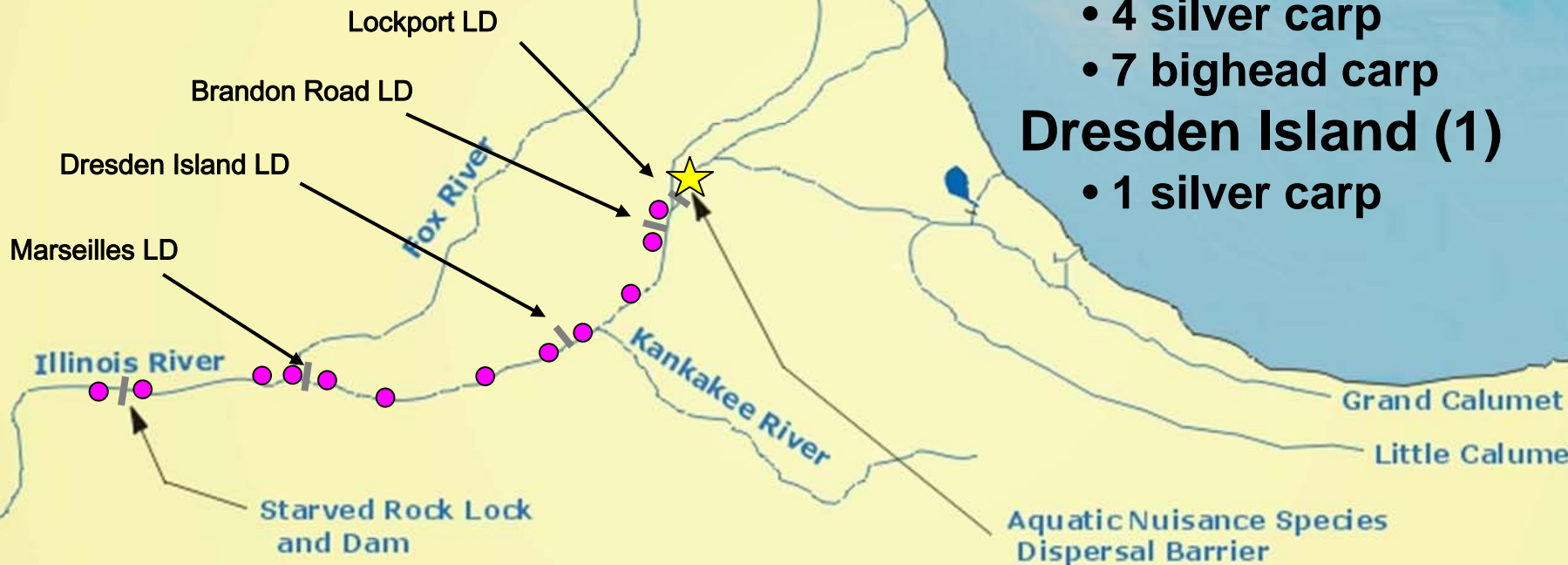
- 17 silver carp
- 8 bighead carp
- 1 hybrid carp

### Marseilles (11)

- 4 silver carp
- 7 bighead carp

### Dresden Island (1)

- 1 silver carp



# 2007 Movements

- **Most tagged fish remained close to release site**
  - Options for population control?
- **4 fish made interpool movements**
  - Locks or dams or both?
- **No tagged fish moved above Marseilles pool**
- **2008 first spring rise with tagged fish**
  - No 2008 results yet



# Acoustic Network

## 12 Stationary Receivers

- 1 - Peoria
- 3 - Starved Rock
- 4 - Marseilles
- 3 - Dresden Island
- 1 - Brandon Road

Aquatic Nuisance Species Barrier

Lockport LD

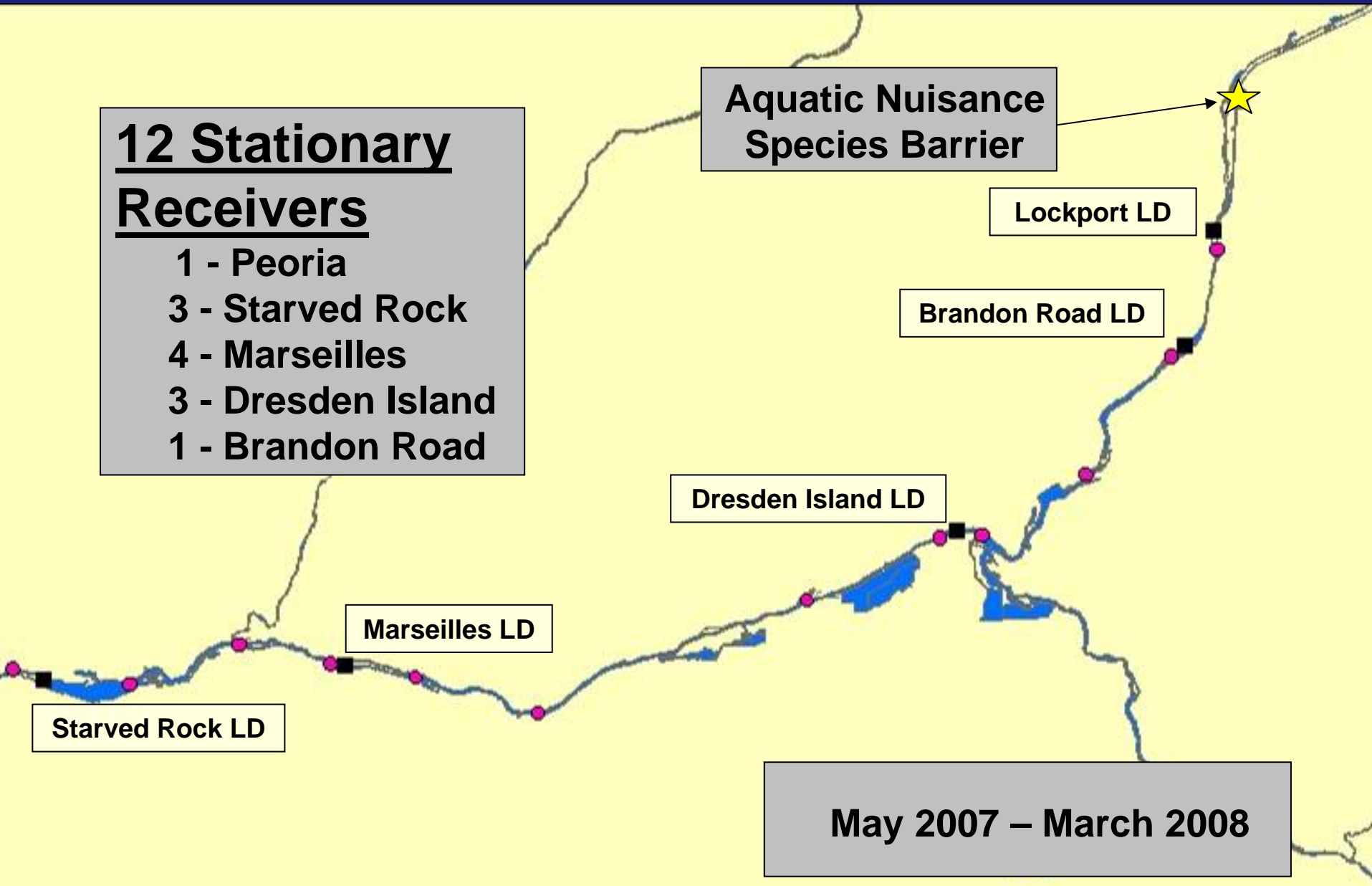
Brandon Road LD

Dresden Island LD

Marseilles LD

Starved Rock LD

May 2007 – March 2008



# Acoustic Network

## 12 Stationary Receivers

- 0 - Peoria
- 0 - Starved Rock
- 2 - Marseilles
- 4 - Dresden Island
- 4 - Brandon Road
- 2 - Lockport

Aquatic Nuisance Species Barrier

Lockport LD

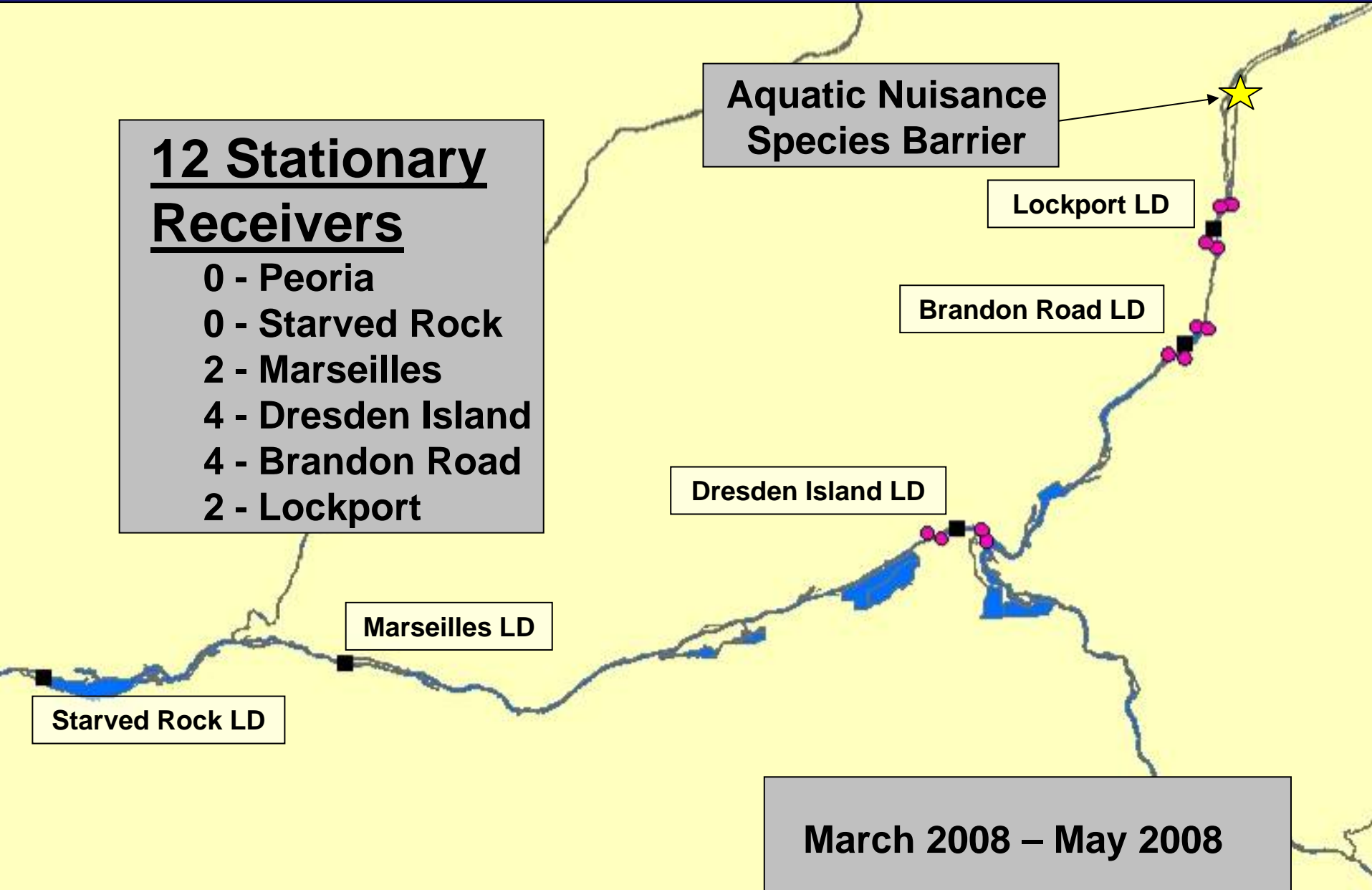
Brandon Road LD

Dresden Island LD

Marseilles LD

Starved Rock LD

March 2008 – May 2008



# 2008

- **Monthly field surveillance sampling ongoing**
- **USACE placing receivers at locks and dams**
  - **Movement through locks or dams**
  - **Easier to recover and download data**
  - **Fewer receivers lost**
- **Tag additional fish in Dresden Island Pool**
  - **2 USFWS tags remaining**
  - **9 tags provided by MRBP**
- **Movements of 37 fish tagged downriver??**
  - **Upper river movements towards barrier**
  - **Within pool movements**
    - ◆ **potential population control = fewer fish reaching barrier**

**Questions?**

# VR2 Downloads

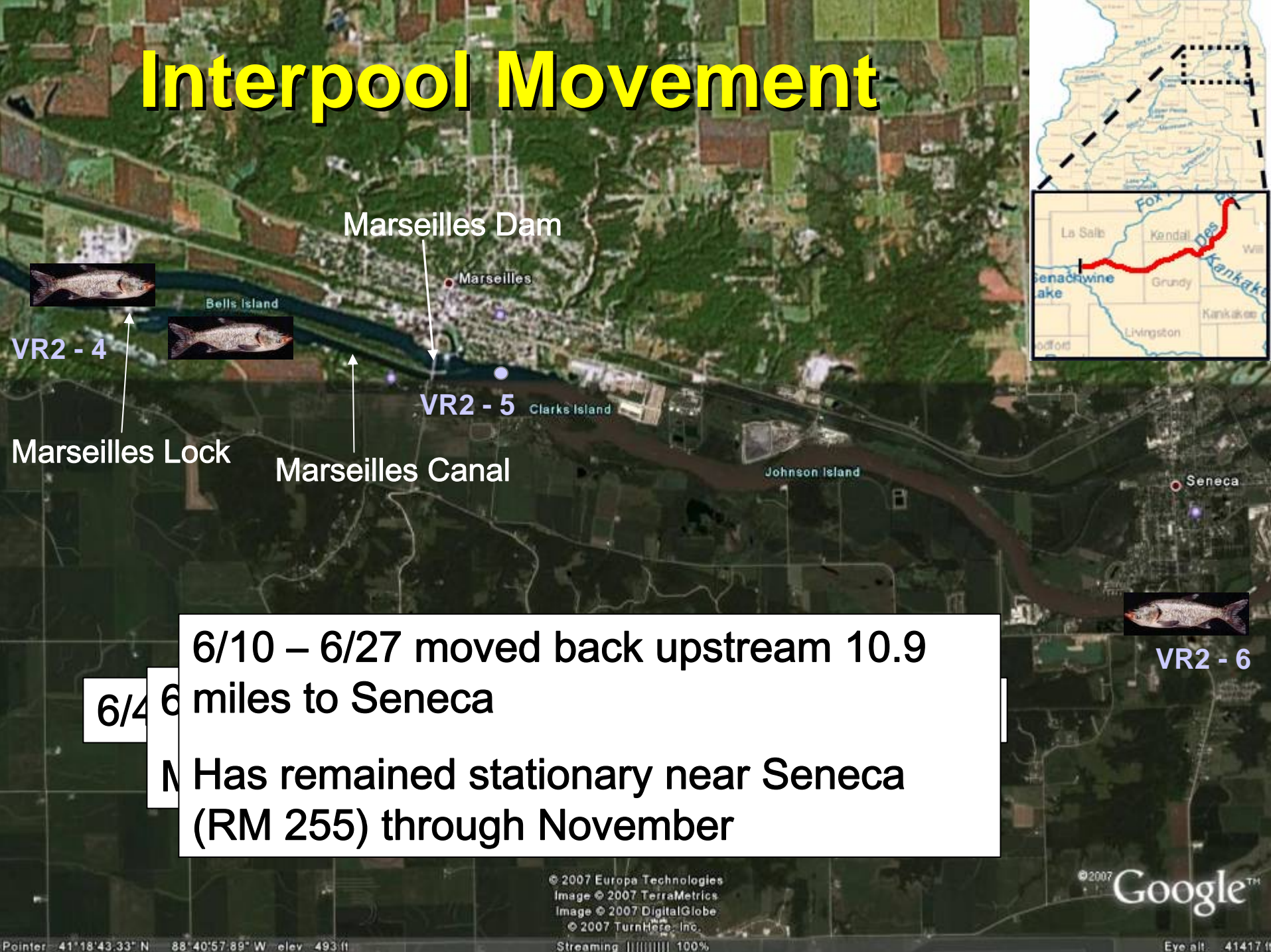
- **Receivers downloaded monthly**
  - **First downloads May 2007**
    - ◆ Carterville NFWCO
    - ◆ Illinois Natural History Survey
    - ◆ US Army Corps of Engineers
      - Rock Island District
      - Chicago District
  - **Telemetry data processed by SIUC**
    - ◆ <http://fishdata.siu.edu/>
  - **Significant movements reported to Dispersal Barrier Advisory Panel**



# Interpool Movements

- **2 Bighead Carp**
  - Tagged April 2007
  - 1 moved downstream from Marseilles to Starved Rock and back upstream in June 4 and June 27
  - 1 moved upstream from Starved Rock to Marseilles between September 21 and November 7
- **2 Silver Carp**
  - Tagged October 2007
  - Both moved downstream from Starved Rock to Peoria in early October following tagging
    - ◆ Out of study area
    - ◆ SIU receivers in lower Illinois River

# Interpool Movement



Marseilles Dam

Marseilles

Bells Island

VR2 - 5 Clarks Island

Johnson Island

Seneca



VR2 - 4

Marseilles Lock

Marseilles Canal

VR2 - 6

6/10 – 6/27 moved back upstream 10.9 miles to Seneca  
6/4 6  
N Has remained stationary near Seneca (RM 255) through November

# Interpool Movement



Bighead carp tagged and released on 4/17/07,  
RM 240

Moving upstream between 9/21 – 11/07/07  
Marseilles Dam or Marseilles Lock?

From April through August remained in that area  
near RM 235



# Interpool Movement

Marseilles Dam



VR2 - 5

VR2 - 6

VR2 - 7

From 9/21 – 11/07/07 moved 29 miles upstream to Morris

Image © 2007 TerraMetrics  
© 2007 Europa Technologies  
© 2007 TurnHere, Inc.  
Image © 2007 DigitalGlobe  
Streaming 100%

Pointer 41°19'19.12" N 88°33'40.97" W elev 534 ft

