

# DON'T MOVE A MUSSEL:

## Preventing Aquatic Invasive Species in Wyoming



Wyoming Game and Fish Department



# Background

- Non-native organisms that cause harm when introduced
  - Includes fish, amphibians, mollusks, crustaceans, plants, and pathogens
  - Some already present in Wyoming
  - Most significant threats not yet in Wyoming



# Background

- AIS not in Wyoming
  - Zebra/Quagga mussels (*Dreissena polymorpha*/*D. rostriformis*)
  - Introduced into Great Lakes in ballast water
  - Transported on trailered watercraft
  - Impedes water delivery, biofoul, decreases natives, changes fish community, changes water quality



Zebra mussel

Quagga mussel

# Impacts

- Present in neighboring states and can spread rapidly

# Impacts

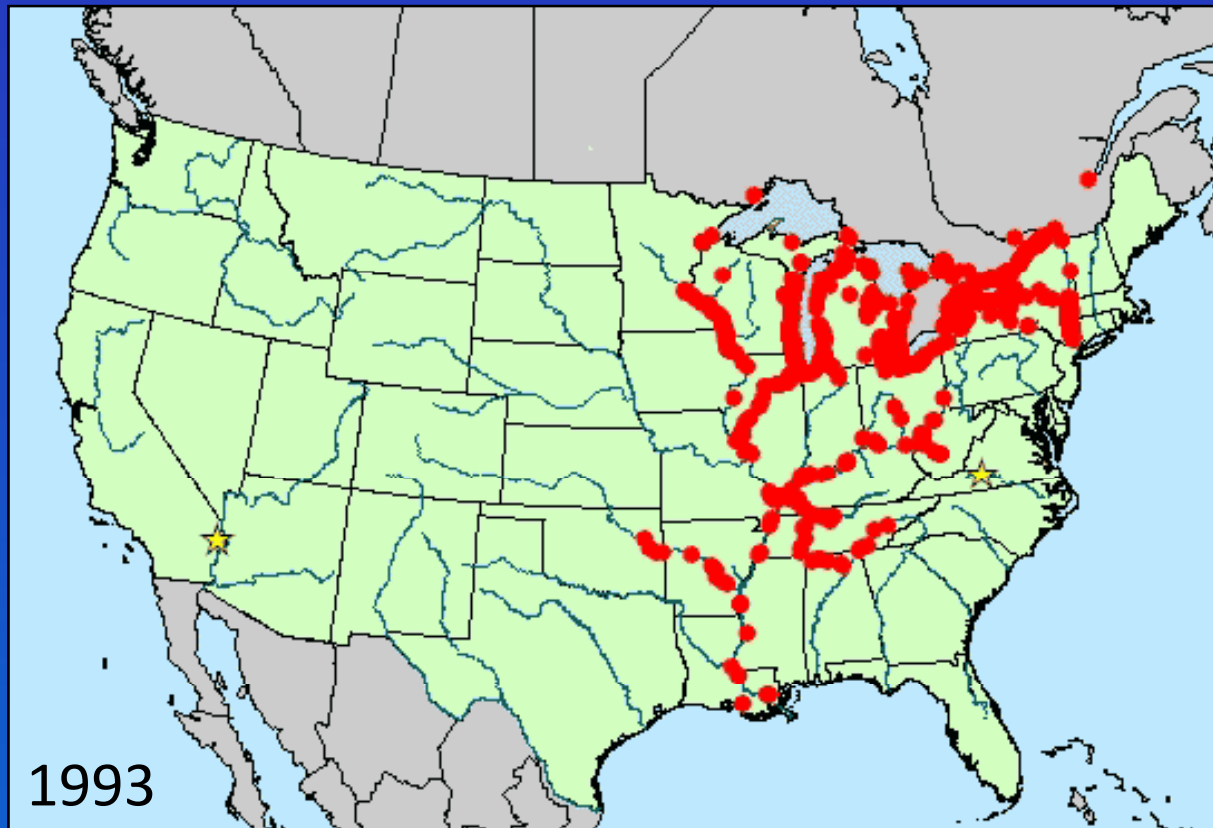
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- Confirmed collections or observations of adults, juveniles, or veligers.
- ★ Discovery of the overland transport of zebra mussels on trailered boats.

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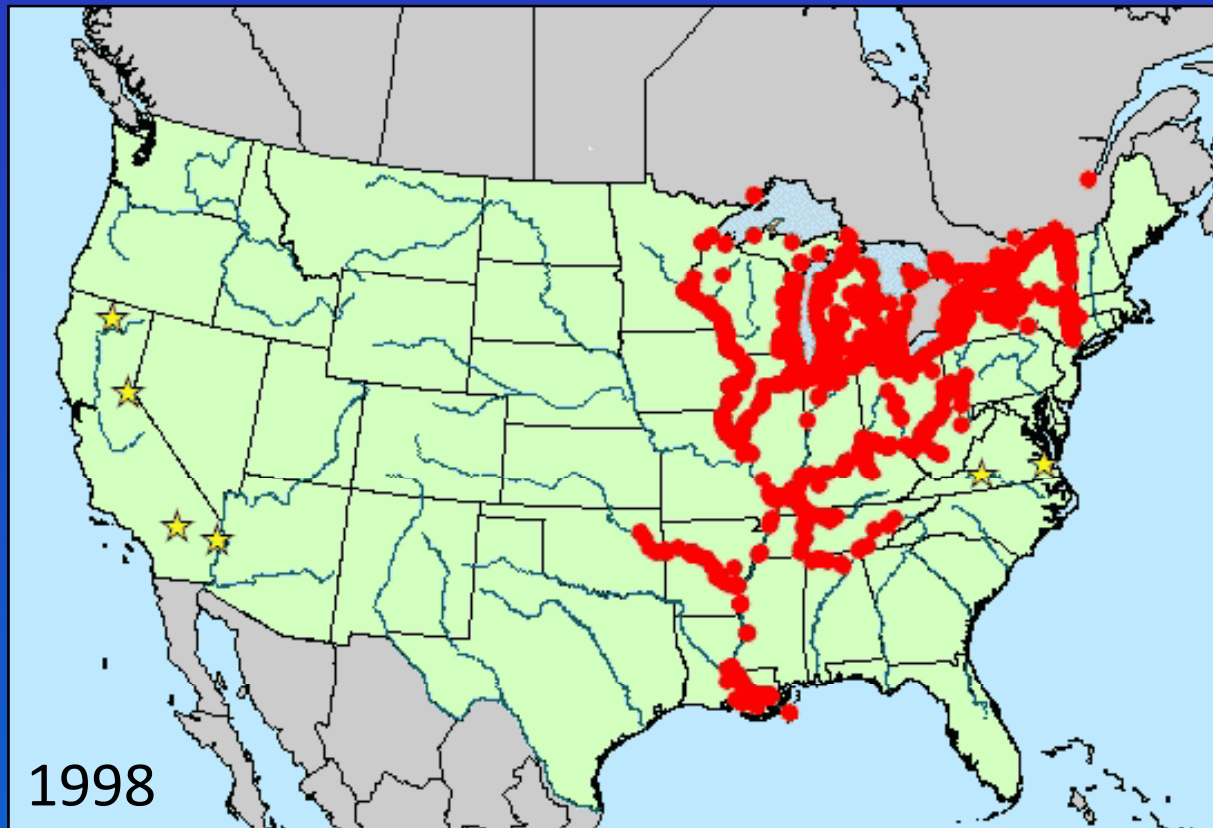
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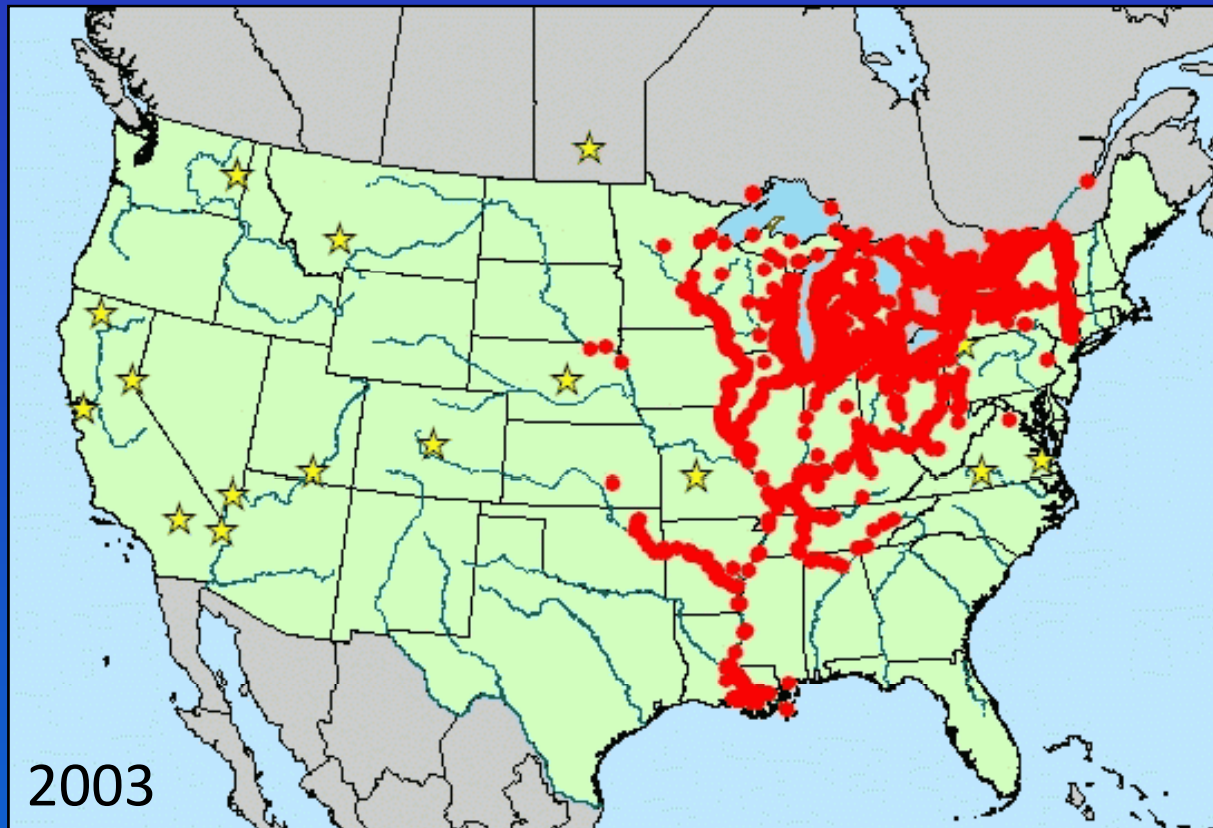
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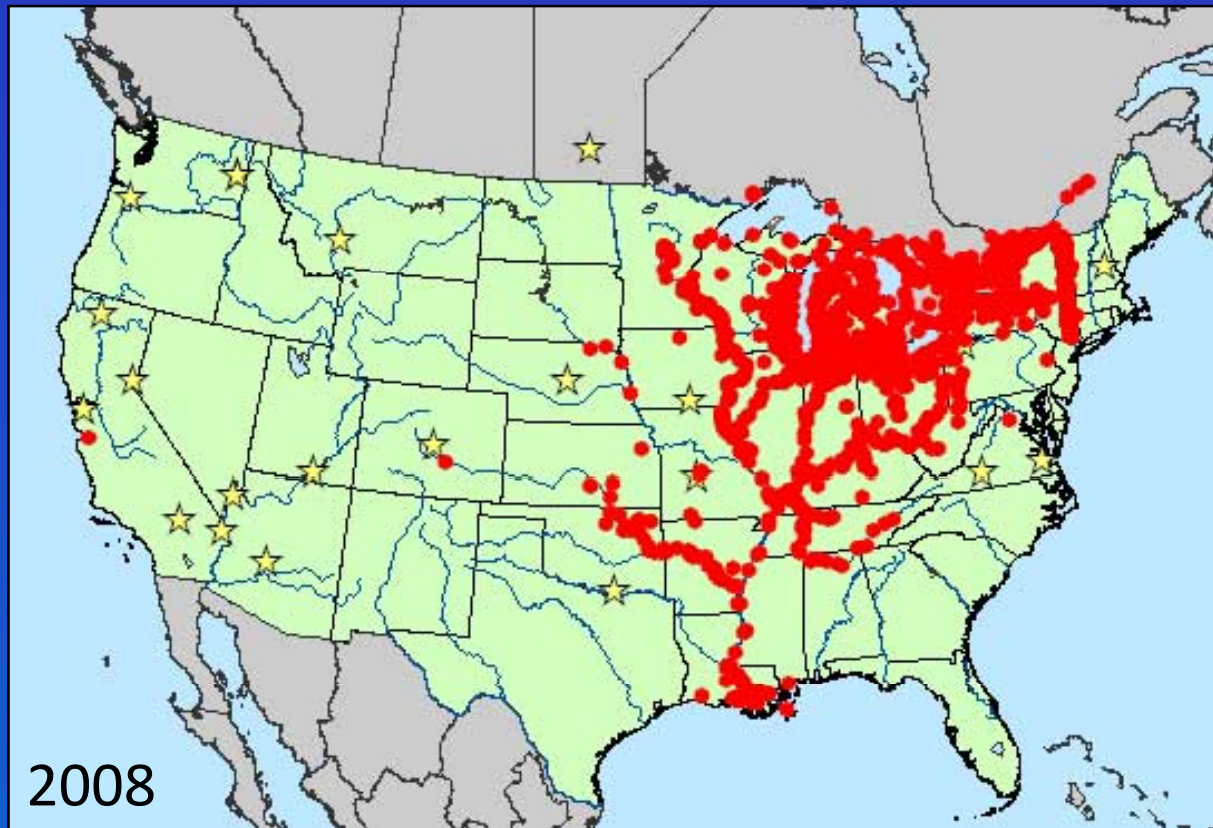


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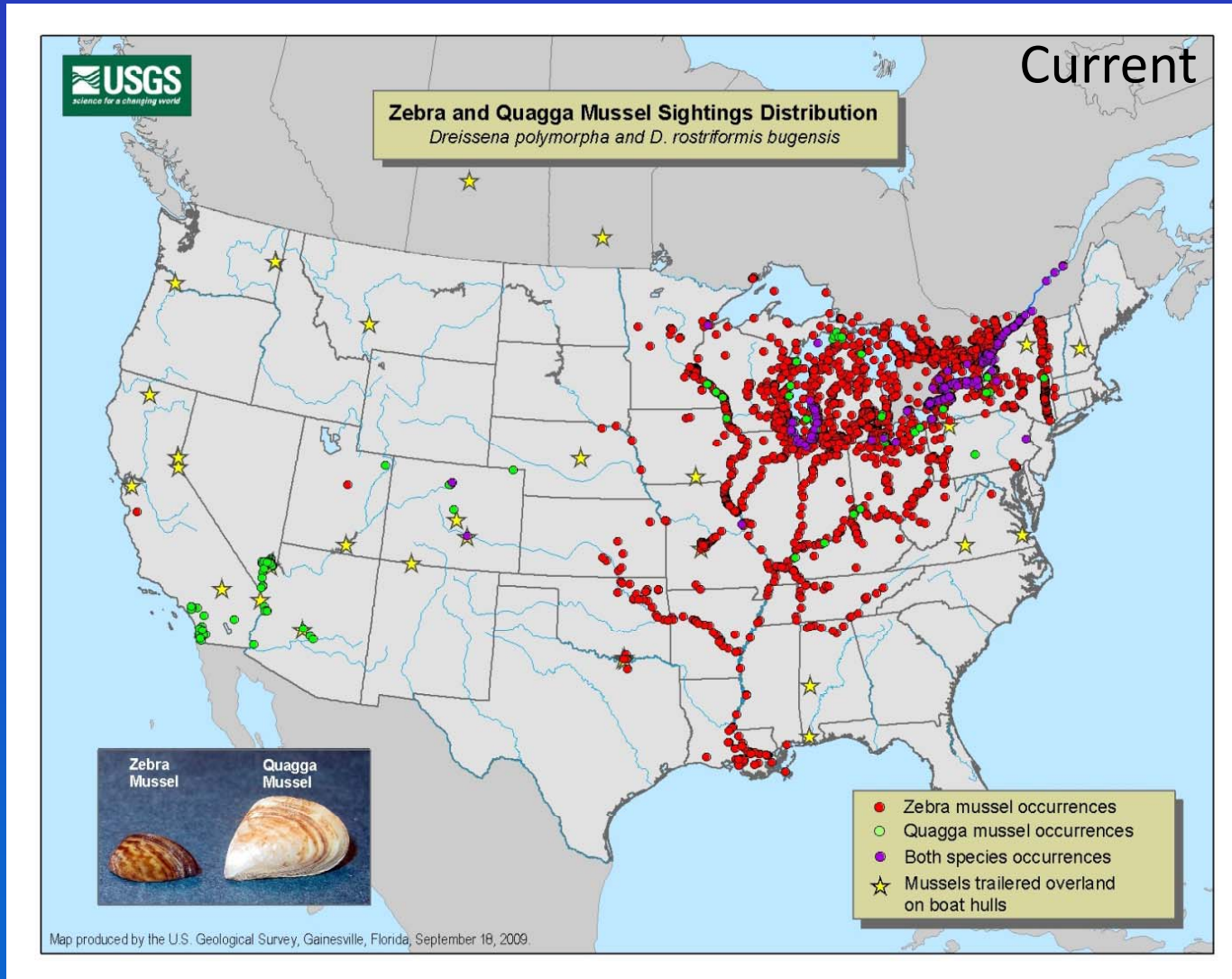
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# Impacts

- Present in neighboring states and can spread rapidly
- High economic and social costs once established
- Recreational
  - Ecological
  - Economical



# Prevention

- What can you expect in 2010?
  - HB 0018-Aquatic Invasive Species Bill
    - Inspection and decontamination of watercraft
    - Authority to develop regulations
    - Civil and criminal penalties
    - A user fee to help pay for the program
    - Funding of \$1.5 million
    - A coordinator for the program

# Prevention

- What can you expect in 2010?
  - Chapter 62-WGFD Emergency Regulation
    - AIS check stations
    - Watercraft inspection and decontamination
    - Authority for impoundment and quarantine if necessary
    - Requirement for mandatory reporting of AIS
    - AIS program fees and decal and requirements



# Prevention

- What can you expect in 2010?
  - Outreach
    - Billboards
    - Media
    - Bumper stickers, key chains, brochures, etc.



# Prevention

- What can you expect in 2010?
  - Priority waters: 10 High, 13 Moderate, 29 Low
  - High

Big Horn Lake

Glendo Reservoir

Boysen Reservoir

Grayrocks Reservoir

Buffalo Bill Reservoir

Jackson Lake

Flaming Gorge Reservoir

Keyhole Reservoir

Fontenelle Reservoir

Seminole Reservoir

# Prevention

- What can you expect in 2010?
  - Priority waters
  - Moderate

Alcova Reservoir

Big Sandy Reservoir

Fremont Reservoir

Granite Reservoir

Guernsey Reservoir

Hawk Spring Reservoir

Lake DeSmet

Ocean Lake

Palisades Reservoir

Pathfinder Reservoir

Sulphur Creek Reservoir

Viva Naughton Reservoir

Wheatland #1 Reservoir

# Prevention

- What can you expect in 2010?
  - Personnel
    - Coordinator
    - Assistant
    - 30 seasonal inspectors

# Prevention

- What can you expect in 2010?
  - Watercraft inspections

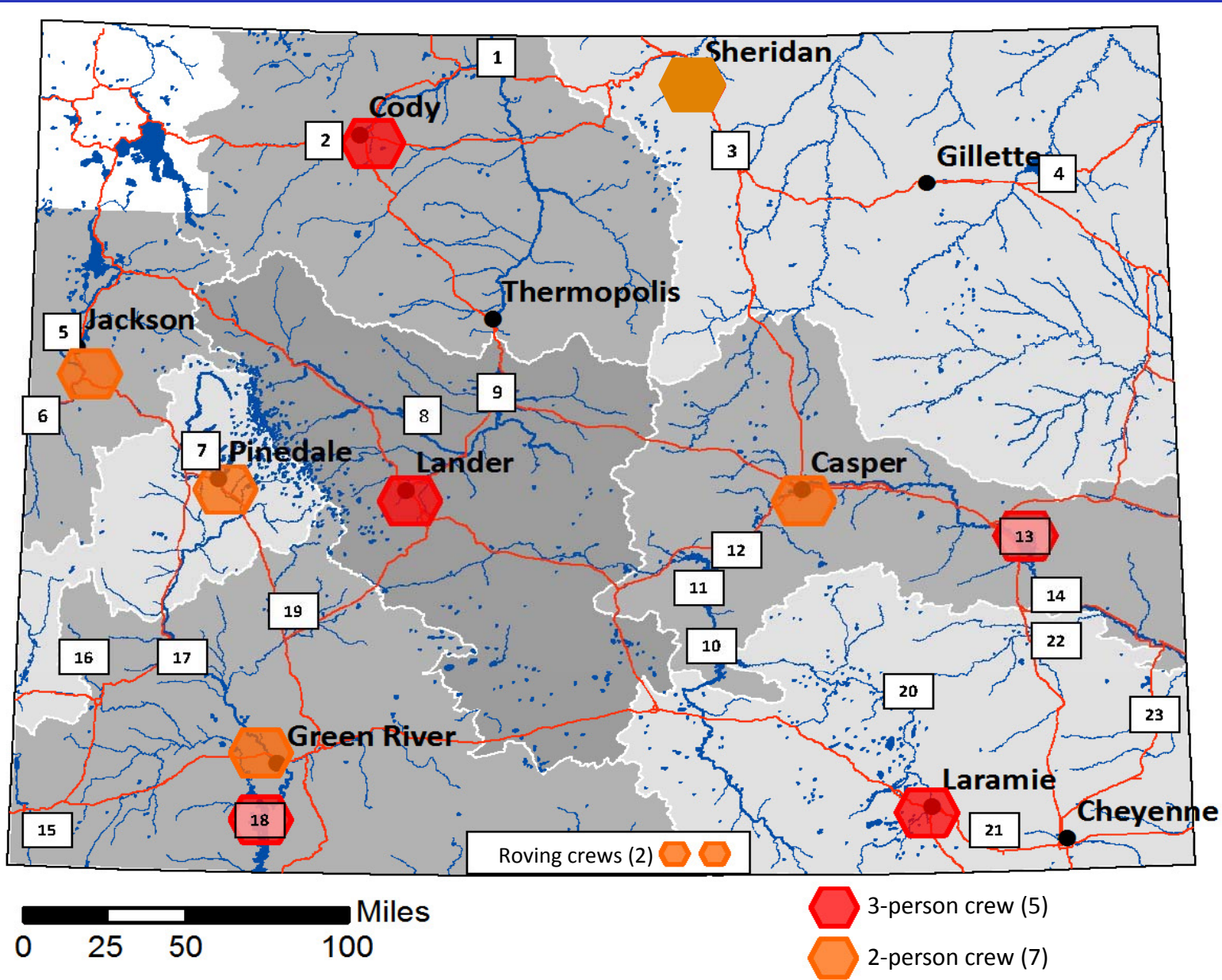


# Prevention

- What can you expect in 2010?
  - Watercraft decontaminations



# Prevention



# Prevention

- What can you expect in 2010?
  - Self-Check

## Don't Move a Mussel

**SELF-CHECK BEFORE YOU LAUNCH IN ANY WATER**  
 protect your water resource and boat motor from invasive zebra and quagga mussels



Follow these simple steps to protect your waters:

- ✓ **DRAIN** All water must be drained from your boat. This includes the ballast, bilge, livewell and motor. Leave wet compartments open.
- ✓ **CLEAN** Remove all plants, mud and debris from equipment and boat.
- ✓ **DRY** Dry your boat or equipment 5 days in the summer, 18 days spring/fall or 3 days of freezing.
- OR** Contact the WGFD to have your boat and trailer decontaminated.

Contact the Wyoming Game and Fish Department if you see attached mussels on your equipment or in Wyoming waters. We can provide more information and assistance in removal. Call 1-877-WGFD-AIS - (877-943-3247)



WYOMING GAME & FISH DEPARTMENT  
 "Conserving Wildlife Serving People"

ARTS, PARKS, HISTORY.  
 Wyoming State Parks & Cultural Resources



STOP AQUATIC HITCHHIKERS!  
 www.ProtectYourWaters.net

## Self-Check Before Launching

**Expect to be Inspected** Be prepared for inspections near all Wyoming boat ramps.

If you have boated in a known infested water in the last 30 days, your boat must be inspected before launching in Wyoming.



In the last 30 days, if you have boated in an uninfested water of a state highlighted on the above map, you must **Drain, Clean, and Dry** before launching in Wyoming. Remember, invasive mussels can be transported before we even know a water is infected. Prevention is the only tool we have to fight these invasive mussels and protect Wyoming's waters.

**Help Save Your Waters From Invasive Zebra and Quagga Mussels!**

- I have not used my boat in any infested waters  
OR
- My boat and trailer have been decontaminated  
OR
- I have followed the Drain, Clean, Dry procedure

Sign: \_\_\_\_\_

Date: \_\_\_\_\_

**Buy your Aquatic Invasive Species Decal before launching your watercraft!**

ALL WATERCRAFT (INFLATABLES 10 FEET OR LESS IN LENGTH ARE EXEMPT) USING WYOMING WATERS ARE REQUIRED TO DISPLAY AN AQUATIC INVASIVE SPECIES DECAL. DECALS MAY BE OBTAINED FROM THE WGFD WEBSITE OR LICENSE AGENTS. (<http://gf.state.wy.us>)



# Prevention

- What can you expect?
  - Monitoring
    - BOR – 7 high priority waters
    - 16 other priority waters



# Prevention

- What can you expect?
  - User-pay fee

**Don't Move a Mussel**

**10R**

**EXPIRES: 12/31/2010**

*\$5 non-motorized* *WY 000001*

**Don't Move a Mussel**

**10R**

**EXPIRES: 12/31/2010**

*\$10 motorized* *WY 000001*

# Closing

- AIS already in Wyoming and more threatening species at our doorstep.
- Introduction of invasive mussels would have dramatic impacts on our resources and cost tens of millions annually to contain.
- Urgent need for the increased efforts in 2010.

# What do we have to lose?



# Acknowledgments

- Photo credits: United States Geological Survey (USGS); Utah Division of Wildlife Resources; Whirling Disease Initiative; Dan Gustafson, Montana State University; Alison Fox, University of Florida, Bugwood.org; Chris Evans, River to River CWMA, Bugwood.org; Joy Viola, Northeastern University, bugwood.org; Noel Burkhead, USGS; Myriah Richerson; Department of Fisheries and Allied Aquacultures, Auburn University; Rob Cosgriff, Illinois Natural History Survey; Kerry Dressler; Leslie Mehrhoff, Invasive Plant Atlas of New England; Frank Koshere , Wisconsin Department of Natural Resources; Joe F. Duft, USDA-NRCS; John M. Randall, The Nature Conservancy; J. E. Marsden, Lake Michigan Biological Station, Dave Jude, Center for Great Lakes Aquatic Sciences; Steffen Zienert; NH Dept. Safety; Mohammed Faisal, USGS; J. Schmidt; Craig Rieben; Ronald Laubenstein; Pedro Ramirez Jr.; Steve Hillebrand; Gary Kramer; Montana Wheat and Barley Committee, Yellowstone National Park.

# Questions & Discussion

