MT Dept. of Agriculture Aquatic Monitoring Program

Results from 2011 Monitoring

MDA 2011 Aquatic Invasive Plant Monitoring

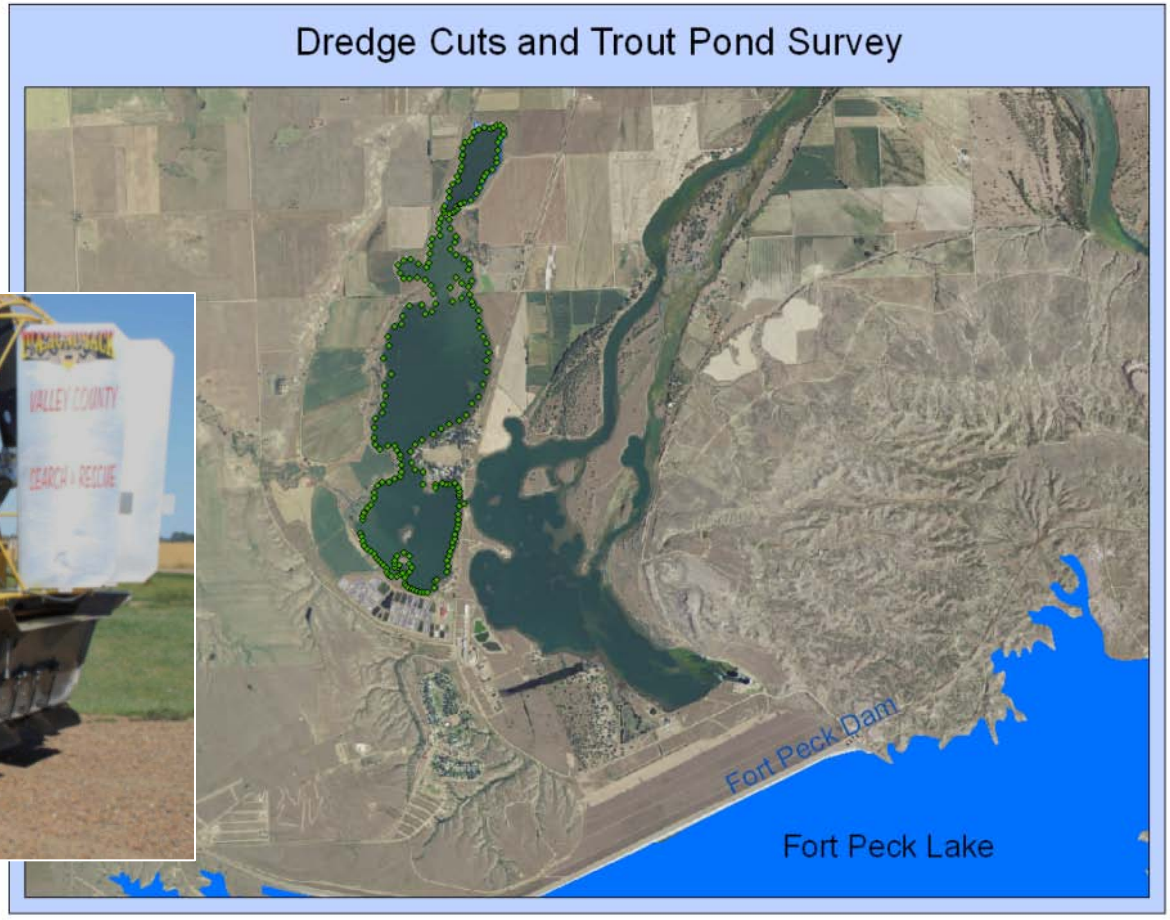
- This year have surveyed many river miles and lake shorelines including:
  - Dredge cuts below Fort Peck Dam
  - Holter Lake
  - Tongue River Reservoir
  - Jefferson River
  - Beaverhead River
  - Madison River

Sampling Protocols

- Two rafts (one for each bank)
  - Two man crew in boat
- Search shoreline, backwaters, & side channels
- Areas of depositions are higher risk
- Note and GPS all plants at sampling points (native and nonnative)
- Use rakes to sample areas not visible

Fort Peck Dredge Cuts and Trout Pond

- 3-5 miles of littoral surveys
- EWM in Dredge Cuts
- Curly-leaf Pondweed in Trout Pond



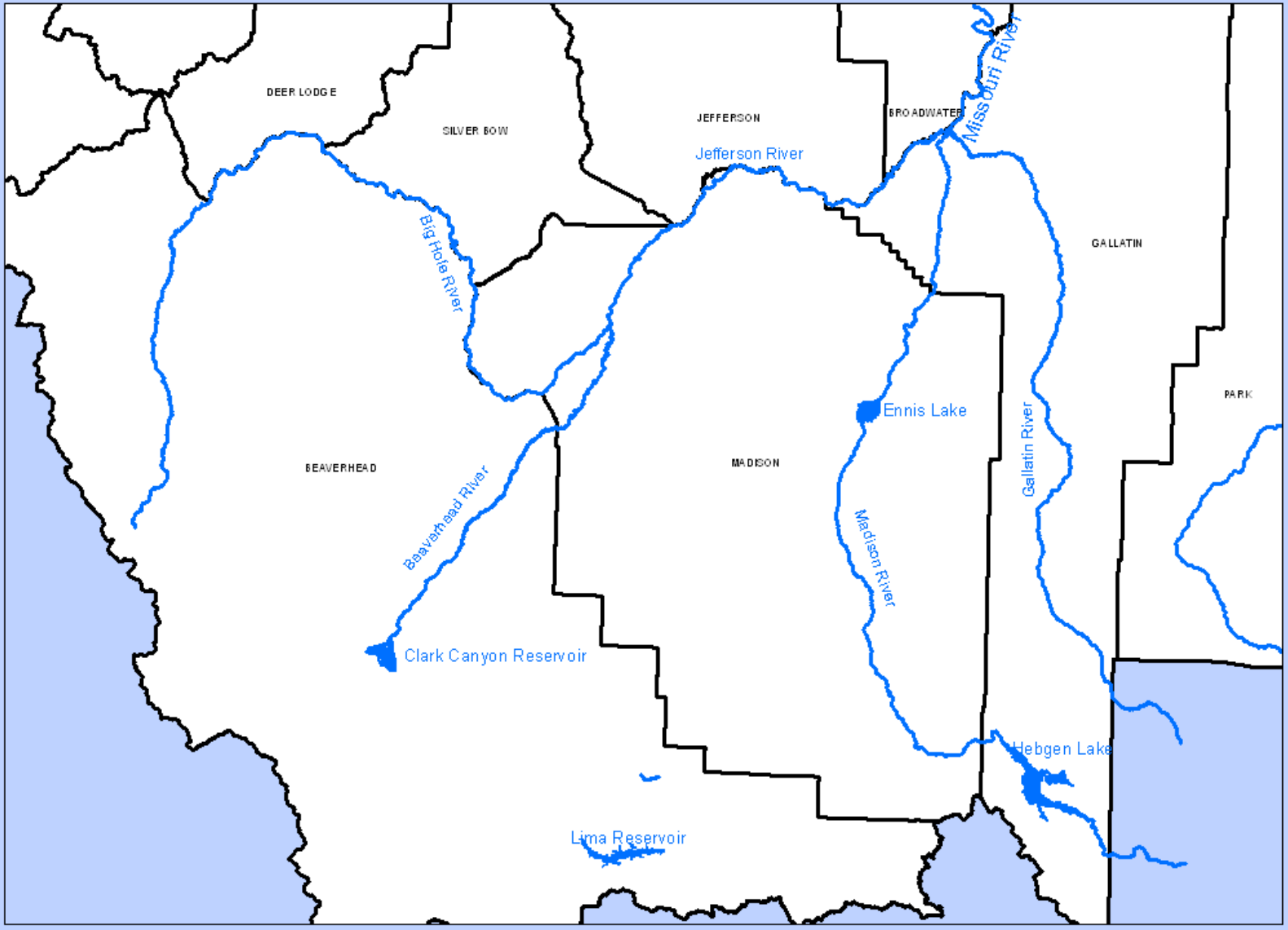
Holter Lake

- Surveyed about half of shoreline
  - Surveyed all high risk areas
- Species include:
  - Sago Pondweed
  - Waterbuttercup
  - Elodea
  - Northern Watermilfoil
  - Curly-leaf Pondweed

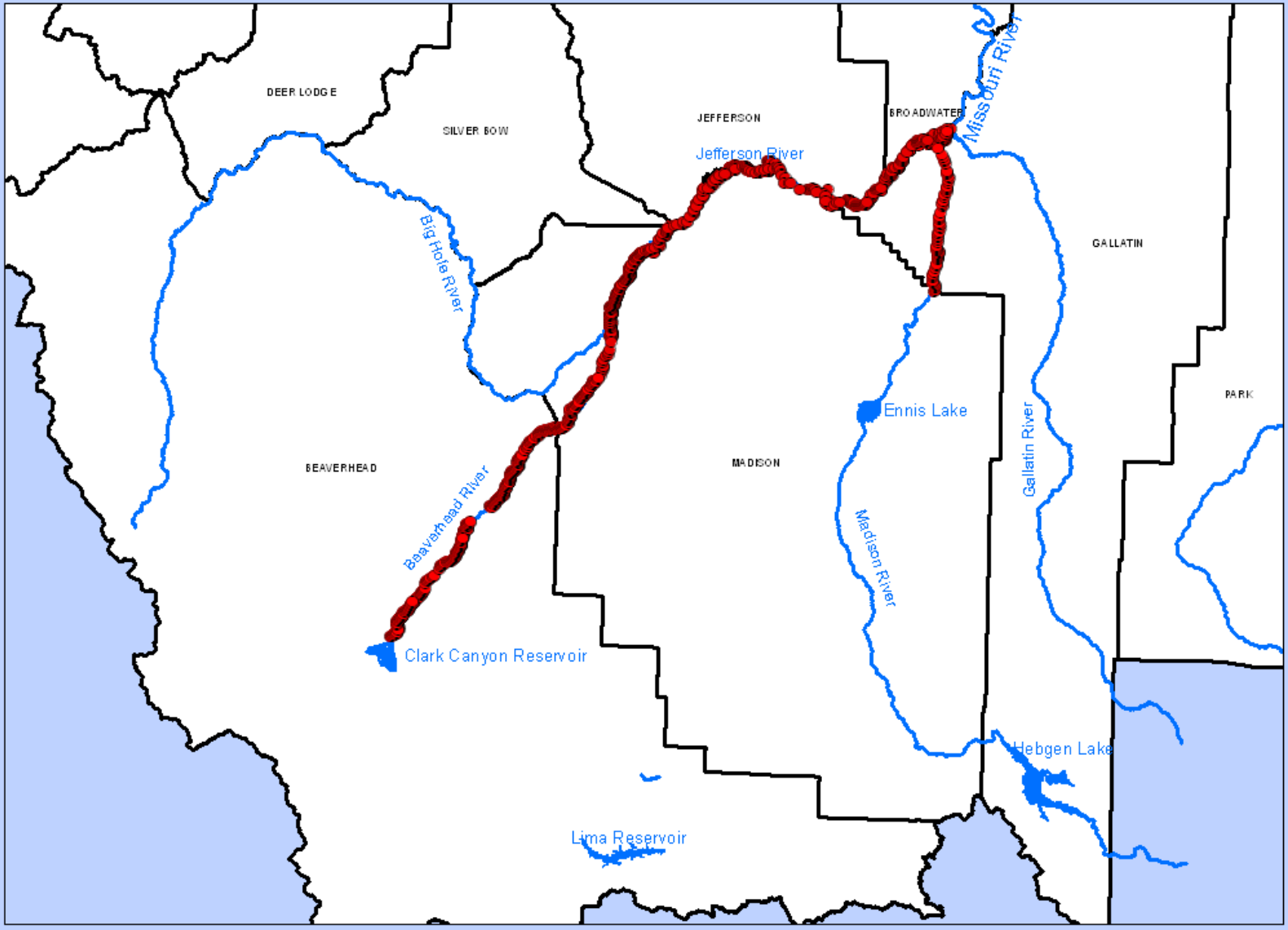
Tongue River Reservoir

- Surveyed roughly half of Reservoir
- Species include:
  - Sago Pondweed
  - Chara spp.
  - Northern Watermilfoil
  - American Pondweed

Missouri River Headwaters Survey



Survey Points to Date



Beaverhead River

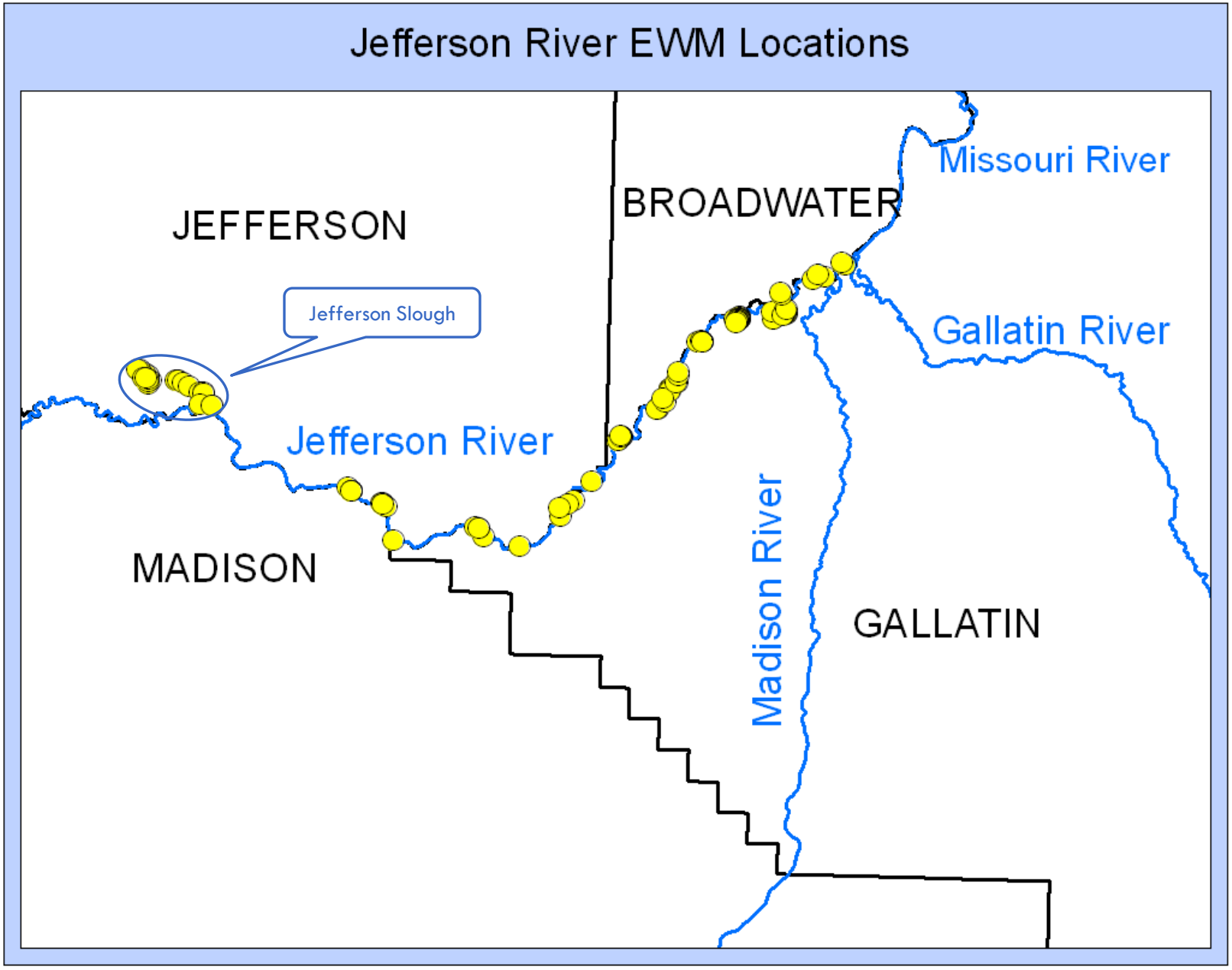
- 70 miles
- Species include:
  - Sago Pondweed
  - Coontail
  - Northern Watermilfoil
  - Waterbuttercup

Madison River

- Surveyed about 30 miles
- Surveys not completed
  - 10 miles remain
- Sago Pondweed
- Curly-leaf Pondweed

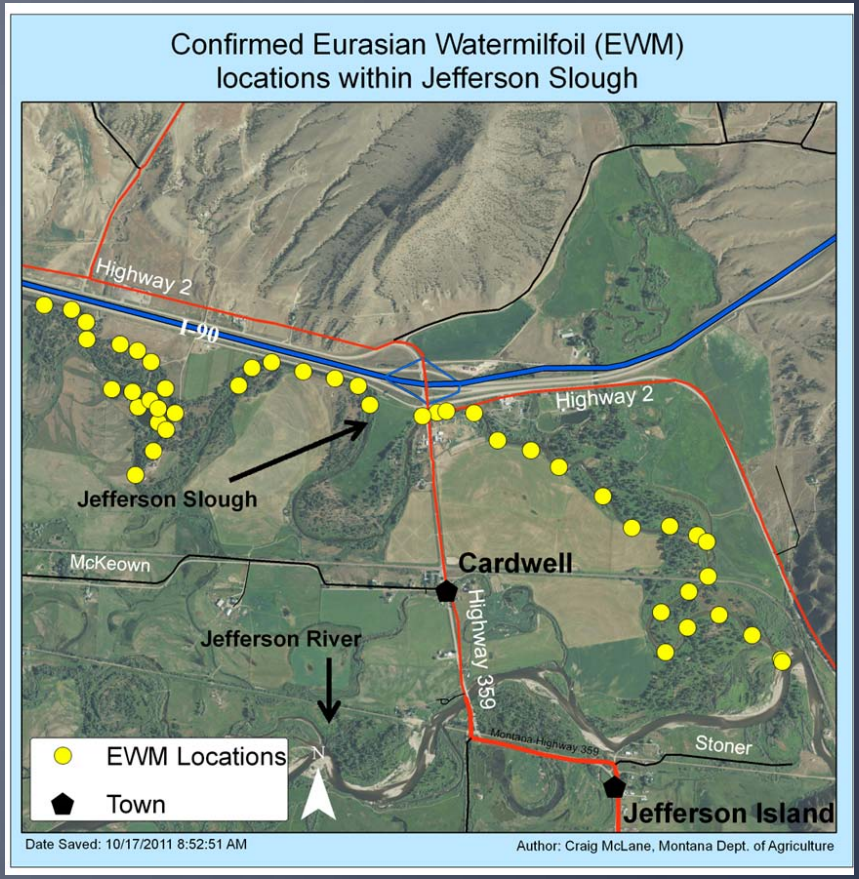
Jefferson River

- 83 miles not including side channels
- Species include:
  - Sago Pondweed
  - Coontail
  - Waterbuttercup
  - Northern Watermilfoil
  - Elodea
  - Chara spp.
  - Eurasian Watermilfoil
  - Curly-leaf Pondweed


Jefferson River EWM Locations
JEFFERSON
BROADWATER
Missouri River
Jefferson Slough
Gallatin River
Jefferson River
Madison River
MADISON
GALLATIN

Jefferson Slough

- Heavy infestation of EWM from Cardwell area down to Jefferson River
- Highest upstream population seems to be about 5 ½ miles from confluence



Planned 2012 Monitoring Efforts

- EWM River Surveys
  - Priority 1 (Complete Missouri River Headwater Surveys)
    - About 10 miles of the Madison River
    - Big Hole River (100 mi)
    - Ruby River (50 mi)
  - Priority 2
    - Upper Missouri River from Three Forks State Park to Canyon Ferry
    - Portions of the Yellowstone River
- EWM Lake Surveys
  - Helena area
    - Hauser Lake
    - Regulating Reservoir
    - Lake Helena
    - Toston Reservoir
    - Canyon Ferry Reservoir

Monitoring Needs for 2012 and Beyond

- Coordinate aquatic plant surveys with FWP for any veliger sampling or other AIS surveys
  - More efficient use of resources
  - Collaboration allows for more survey work
- Coordinate planned survey efforts with Weed Districts and Conservation Districts
  - Help them become more involved and provide them training
  - More eyes watching out for AIS
  - They can help provide outreach in their local areas
- Incorporate other local groups and volunteers to cover more ground
- Develop a long-term monitoring program with stable funding
  - Water bodies need to be revisited regularly

Conclusion

- Successfully surveyed many river miles and lake shoreline
- More survey work is planned to help monitor and prevent spread of aquatic invasive plants.
- State and local agencies and organizations can increase monitoring effectiveness.
- Secure funding will allow for long-term monitoring

Thank You!

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